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(41-44).

Miscellaneous No. 239.

# PAPERS

RELATING TO

# LEPROSY IN CERTAIN BRITISH COLONIES.



COLONIAL OFFICE,
August, 1909.



616-002-73 (41-44) 23 68 Miscellaneous No. 239.

# PAPERS

RELATING TO

# LEPROSY IN CERTAIN BRITISH COLONIES.

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# PAPERS

RELATING TO

# LEPROSY IN CERTAIN BRITISH COLONIES.

With the object of collecting information to be laid before the Second International Scientific Conference on Leprosy, appointed to be held at Bergen from the 16th to the 19th of August, 1909, under the patronage of His Majesty the King of Norway, a circular despatch was addressed by the Earl of Crewe, K.G., Secretary of State for the Colonies, to the Crown Colonies and Protectorates covering the following list of questions which had been drawn up under the advice of the Local Government Board. The despatch attached special importance to the tables under " A " and " E."

LIST OF QUESTIONS RESPECTING LEPROSY.

#### A.—Number of known Cases—

Year.	No. of New Cases of Leprosy recognised during the year.	Total No. of cases known to be present in the Country Colony in the year.	No. of Deaths from Leprosy during the year.	Estimated population of the Country Colony.
1897 1898 1899 1900 1901 1902 1903 1904				
1905 1906 1907 1908				

B.—Distribution of Cases—

- 1. As to whether on the littoral or inland, or any other facts of interest as to grouping of cases.
- 2. Any facts bearing on possible relation of the distribution of cases to race, soil, food, or other conditions.

C.—Notification of Cases—

- Is the disease compulsorily notifiable?
   If so, after what duration of illness are cases usually notified?

D.—Administrative Control—

1. What action is taken after notification of cases, or apart from such notification as to-

(a) Disinfection.

- (b) Segregation of patients.
- (c) Other measures.

E.—Segregation

How is segregation effected?

Where practicable, please give the following information for each asylum.

#### 1. Name of Institution for Leprosy.

N. of D.J.	No. of Patients.*				
No. of Beds.	At beginning of year.	At end of year.			

<sup>\*</sup> Where these figures cannot be given, please state average number of patients.

F.—Kindly send any printed reports dealing with the history or management of leprosy in the Colony or Protectorate.

The Governments from which replies have been received are as follows:—

Mediterranean—Cyprus, Gibraltar, Malta. West African—Gambia, Gold Coast, Northern Nigeria, Sierra Leone, Southern Nigeria.

East and South African—Basutoland, Bechuanaland Protectorate, East African Protectorate, Nyasaland, Somaliland, Southern Rhodesia, Swaziland, Uganda.

West Indian—Bahamas, Barbados, Bermuda, British Guiana, British Honduras, Grenada, Jamaica, Leeward Islands, St. Lucia, St. Vincent, Trinidad, and Tobago.

Eastern.—British North Borneo, Ceylon, Hong Kong, Mauritius, Seychelles, Straits Settlements.

Miscellaneous—Falkland Islands, Fiji, Western Pacific (Tonga), St. Helena.

Leprosy has not been recorded in Somaliland or the Falkland Islands.

For the purpose of this report it has been considered advisable to classify the information supplied in a form convenient for reference, instead of printing replies in full. Some specimens of Colonial legislation have been added, but the bulk of the Colonial Acts and Ordinances, and regulations made thereunder, have not been included.

#### Number of known Cases.

Colony or Protectorate.	Year.	No. of New Cases of Leprosy recognised during the year.	Total No. of Cases known to be present during the year.	No. of Deaths from Leprosy during the year.	Estimated Population.
Cyprus	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	21 19 12 13 12 12 12 12 6 13 4 12 7	107 111 107 111 107 106 108 109 109 96 95 98	14 15 16 12 12 12 9 13 9 17 10 4	209,286 (1891 census). 237,022 (1901 census)
Gibraltar	1902 190 <b>3</b> 1904 1905 1906	1 - - -	1 1 1 1	_ _ _ 1	24,000
Malta*	1900 1901 1902 1903	81 4 3 8	81 61 61 67	$\frac{10}{\frac{4}{4}}$	183,679 188,141 193,315 197,070

<sup>\*</sup> Note.—In 1893 an Ordinance was passed for checking the spread of leprosy and the construction of an asylum was undertaken. The male wards were completed in 1899 and the Ordinance was brought into operation as regards male lepers only from the 15th January, 1900.

Colony or Protectorate.	Year.	No. of New Cases of Leprosy recognised during the year.	Total No. of Cases known to be present during the year.	No. of Deaths from Leprosy during the year.	Estimated Population.
Malta—continued.	1904 1905 1906 1907 1908	6 5 1 4 4	66 66 68 71 66	5 4 2 1 4	202,134 205,059 206,689 209,974 212,888
Gambia	1908	5	5	1	8,800
Gold Coast	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	$\left[\begin{array}{c}24\\9\\6\\10\\16\\9\\15\\16\\15\\19\\27\\20\end{array}\right]$	No accurate statistics available.		Nearly 2 millions. Increase since census of 1901 probable.
Northern Nigeria*	1904 1905 1906 1907 1908	$\left[\begin{array}{c} 21 \\ 15 \\ 16 \\ 59 \\ 33 \end{array}\right)$	Not known	No record.	Estimated a 7,000,000.
Sierra Leone†	1905 1906 1907 1908	26 ) 21 ( 13 )	Not known	Not known.	Estimated a 1,247,929.
Southern Nigeria, Western Province. (Cases at Yaba Leper Asylum. Number for Colony or Protectorate quite unknown.)	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	3 5 14 16 15 10 5 6 1.1 9 6 5		2 4 6 3 2 2 3 0 1 1 5	About 2,000,000.
Central Province (Onitsha Asylum).	1907 1908	2 8	37	$\frac{4}{7}$	About 2,000,000
Eastern Province	1907 1908	40 25	_	$\frac{2}{0}$	
Basutoland	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907	No record  " 36 20 16 28 12 12 162 23	155 155 155 191 211 227 253 257 259 421 444		281,902 347,731
Bechuanaland Protectorate	1908	28	472 own. See pag	- 1	

<sup>\*</sup> Note.—All cases seen are sporadic cases which attend the various dispensaries as out-patients for relief of symptoms and are then lost sight of.
† Note.—There is little doubt that the number of cases reported falls far short of the number that exists.

Colony or Protectorate.	Year.	No. of New Cases of Leprosy recognised during the year.	Total No. of Cases known to be present during the year.	No. of Deaths from Leprosy during the year.	Estimated Population.
East Africa Protectorate A number of cases are known					
Nyasaland	1908	15	769	26	997,218
Southern Rhodesia:—  Mashonaland  Matabeleland	1908 1908		364 137		
Swaziland	1907 1908	1		<u> </u>	85,491 (in 1904)
Uganda	1300	See pa	nge 19.	1	Estimated at 4,500,000.
Bahamas :— New Providence  Inagua*	1905 1906 1907 1908 1907	7 8 4 6 5	_ _ _ 5	. 1 1 1 0 0	14,000 ,, ,, 1,300
	1908	0	5	1	1,100
Barbados (The numbers refer to the Lazaretto only).	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	22 23 17 13 17 24 11 19 23 13 14 12	113 118 112 112 113 119 116 124 131 126 119 121	16 18 22 13 16 18 14 11 15 18 20 7	198,238 194,518
Bermuda	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	8 to 10 cass or kn		1 4 1 0 0 0 2 1 0 0 0 1	19,000
British Guiana. (The total number of cases refers only to asylum inmates).	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	84 119 99 80 67 84 85 84 63 85 100 103	363 374 390 400 398 408 434 414 414 420 377 403	44 41 48 48 46 63 52 76 48 71 84 88	286,484 286,222 287,288 294,943 300,748 302,172 302,628 301,923 303,390 306,959 304,549 304,089
British Honduras	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	1 - - 1 - - -	1 2 1 1 1 2 2 2 2 1 Nil	- - - - - - - - 1	34,277 34,747 35,226 36,999 37,479 38,315 38,981 39,668 40,372 41,007 42,406 43,270

<sup>\*</sup> Note.—The Inagua Hospital was opened in 1907.

Colony or Protectorate.	Year.	No. of New Cases of Leprosy recognised during the year.	to be present	No. of Deaths from Leprosy during the year.	Estimated Population.
Grenada	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908			0 0 0 1 0 4 1 0 2 2 2 1 2	61,299 62,622 64,098 65,523 64,288 65,627 66,762 68,253 69,530 69,784 71,504 72,988
Jamaica (Number in Leper Asylum).	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	31 35 15 21 18 7 16 32 23 16 13 12	106 127 118 122 120 110 168 117 114 115 113 105	16 13 20 20 15 14 17 20 23 14 15 14	830,261
Leeward Islands, Antigua	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	2 8 8 6 4 6 6 15 5 4 2 3	32 32 37 42 36 40 40 40 33 39 41 40 37	3 2 5 7 3 3 4 7 2 4 7	37,799 37,983 37,972 37,970 34,953 35,271 35,104 35,337 35,481 35,749 35,989 36,160
St. Kitts-Nevis.* (Number in Leper Asylum.)	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	4 11 11 6 6 9 1 10 5 2 3 7	63 65 67 64 63 71 61 68 63 60 60 61	7 6 9 8 7 1 11 4 10 3 5 6	48,632 49,222 49,715 50,305 46,807 47,438 47,939 48,391 48,953 49,460 49,870 49,000
Dominica	1908	_	7	None	32,000
Montserrat	1908	None	About 6	None	12,000
Virgin Islands	1907	1	3	None	5,000
St. Lucia	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	1 4 1 0 1 3 1 3 5 6 3 0	No information.		<b>50,000</b>

<sup>\*</sup> Note.—In 1907 it was ascertained that there were 80 lepers besides those (60) in the Asylum.

Colony or Protectorate.	Year.	No. of New Cases of Leprosy recognised during the year.	Total No. of Cases known to be present during the year.	No. of Deaths from Leprosy during the year.	Estimated Population.
St. Vincent	1897 1898 1899 1900 1901 1902–3 1903–4 1904–5 1905–6 1906–7 1907–8	No record	No information except as to pauper lepers, of whom there have been not more than 12 recently. In 1908-9, six.	1 3 1 2 3 4 4 2 1 4 1	46,112 44,000 44,633 45,540 48,248 47,681 48,424 49,236 50,170 51,009 51,779
Trinidad (1901, numbers for January to March only).	1897 1898 1899 1900 1901 1901–2 1902–3 1903–4 1904–5 1905–6 1906–7 1907–8	52 83 67 87 12 107 86 85 103 91 89 89	233 265 257 271 269 303 317 313 337 296 262 267	23 36 46 47 6 41 38 45 38 56 41 43	249,358 256,530 264,814 273,381 275,303 287,030 292,259 301,174 308,435 320,024 329,504 336,767
British North Borneo	1902 1903 1904 1905 1906 1907 1908	_ _ _ _ _	26 17 20 28 29 28 39	<del>-</del> - - - -	
Ceylon. (Hendela and Kalmunai Asylums.)	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	89 90 83 95 97 79 94 131 123 111 91 119		32 46 48 42 46 43 85 61 76 69 67 68 o 26.	3,568,865 3,984,985
Hong Kong*	1898 1908	_	22 13	_	157,000 in 1907.
Mauritius. (Cases are taken from St. Lazare Asylum only. Deaths are for all Colony.)	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	71 76 63 54 64 51 50 49 58 80 74 88	142 140 149 125 118 99 106 105 111 137 128 129	41 62 44 32 48 39 34 30 27 11 5	377,856 378,872 379,659 383,086 373,044 376,260 374,644 378,745 377,532 375,400 376,635 374,237
Seychelles (Asylum only)	1901 1902 1903 1904 1905 1906 1907 1908	2 3 1 1 2 3 2 1	7 10 10 10 11 14 14 14 12	0 1 1 0 0 2 3 3	19,200 19,700 20,000 20,400 20,700 21,000 21,500 22,000

<sup>\*</sup> Note.—These numbers refer to a leper settlement in the New Territory. Otherwise any cases that occur are deported.

Colony or Protectorate,	Year.	No. of New Cases of Leprosy recognised during the year.	to be present	No. of Deaths from Leprosy during the year.	Estimated Population.
Straits Settlements  ("Number of new cases recognised" is a list of admissions and re-admissions to the Asylums).	1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908	231 233 211 191 183 181 215 212 274 223 203 206	550 533 505 448 446 451 491 598 607 624 594 595	166 149 174 126 112 96 106 178 112 153 133 118	580,563 592,587 560,403 567,178 574,029 581,219 588,544 595,782 603,824 611,790 619,796 628,016
Fiji	1908		Under 300	_	_
Tonga	1908	Nil	6	Nil	20,000
St. Helena*	1905 1906 1907 1908	0 1 0	3 2 3 3	1 0 0 1	3,781 3,746 3,558

<sup>\*</sup> Note.—A death from leprosy is recorded in 1901.

B.—Distribution of Cases.—Most of the observations bearing on this question are recorded in the extracts printed at the end of this Report. To them, however, may be added that littoral distribution is reported from Gibraltar, Malta, Bahamas, and St. Lucia, and general distribution from Cyprus, Gambia, Sierra Leone, Southern Nigeria, East Africa Protectorate, Barbados, Bermuda, British Guiana, and Leeward Islands. It must, however, be remembered that many of the smaller Colonies are insular and that the whole population may be considered littoral. Cases are reported to be confined to natives in Southern Nigeria and to be found among all races without distinction in Cyprus, Barbados, and the Leeward Islands. Other notes on racial distribution will be found in the extracts.

C.—Notification of Cases.—The returns show that notification is not usually compulsory. It is enforced in Cyprus, Bechuanaland Protectorate, Swaziland, British Guiana, Grenada, British North Borneo, Ceylon, and Seychelles, and, for males only, in Malta.

D and E.—Administrative action and segregation.—Disinfection is generally not required. It is carried out in Malta, Southern Nigeria, Bermuda, Trinidad, British North Borneo, and the Straits Settlements. In Swaziland and St. Kitts-Nevis huts are destroyed by burning.

Where there is a leper asylum, compulsory segregation is naturally effected by confining the patients to it; for example, in Cyprus, British Guiana, British North Borneo, and Ceylon.

A partial, but apparently a fairly high, degree of segregation is attained by legislation providing for the detention of lepers found in an indigent state, engaged in certain prohibited trades, or using public baths or other specified institutions. Ordinances of this character are found in Barbados, Jamaica, Trinidad, the Straits Settlements, and Fiji. The following extract from the Straits Settlements' return will indicate the general character of such legislation:—

The Governor in Council may by notification in the "Gazette" prohibit the carrying on by a leper of any of the following trades or callings: baker, butcher, cook, any trade in which the person employed handles or comes in contact with articles of food or drink, drugs, medicines, or tobacco in any form, washerman, tailor, any trade or calling in which the person employed manufactures, handles, or comes in contact with wearing apparel, barber or any other similar trade or calling in which the person employed comes in contact with other persons, domestic servant, nurse, jinrikisha puller, licensed hackney carriage driver, boatman on any boat licensed for the conveyance of passengers or cargo. Any leper so offending may be

committed to a leper asylum by a court of two magistrates until discharged by order of the Governor. Any leper who shall enter any hackney carriage, jinrikisha, or other public vehicle, or lodge in any hotel, boarding house, or lodging house, or bathe in any public bath, may on conviction before a magistrate be detained in a leper asylum until he is discharged by order of the Governor.

If it be proved to the satisfaction of a magistrate that any leper is not maintained in a state of isolation from the general public it shall be lawful for such magistrate by warrant under his hand and seal to order the detention of such leper in a leper asylum until he is discharged by order of the Governor.

Illustration.—A leper who frequents the public streets, whether in a vehicle, on foot, or otherwise, will not be in a state of isolation.

When a leper is so arrested and committed to an asylum the municipal or governmental authorities, as the case may be, disinfect the house or room in which he had dwelt.

Lepers are allowed to live in their own houses as long as they obey the clauses of the Lepers Ordinance already quoted.

In Malta male lepers are segregated and the rule will shortly be extended to females. In Bermuda, where there is no asylum, segregation is effected in a small hut or outhouse. Grenada receives two pauper cases in the Poor Asylum. In Swaziland cases are isloated at their own kraals or a hospital. In Tonga lepers must be isolated by their relations.

Native systems of segregation appear to be widely spread in Africa. One method is described in the extract from the Gold Coast Report on page 12. In Southern Nigeria lepers are segregated "in the hinterland at 'leper farms' outside several of the large towns voluntarily by the natives and under the control of the native chiefs." It is noted that "medical officers very rarely see leprosy." The East Africa Protectorate return states that "the Arabs would appear to practise a system of segregation of their own accord. They are shy of reporting cases and usually isolate their cases in the bush." There would also seem to be some voluntary segregation in Basutoland and the Bechuanaland Protectorate.

Deportation of persons domiciled outside the Colony may be resorted to in Bermuda and Gibraltar. Cases found in Hong Kong are deported to Canton.

#### Institutions.

No institution for leprosy exists or is under construction in Gibraltar, Gold Coast, Northern Nigeria, Basutoland, Bechuanaland Protectorate, Nyasaland, Swaziland, Uganda, Bermuda, or the Montserrat and Virgin Islands Presidencies of the Leeward Islands. A Government Refuge for Lepers is under construction in the East African Protectorate. At present the Government pays the Church Missionary Society hospital a capitation fee for retaining in segregation at Mzizima lepers found in the town of Mombasa. In Grenada two pauper cases have for some years been treated in the Poor Asylum. In St. Lucia lepers have usually been treated in the Yaws Asylum when they would consent to go there. At the beginning and end of 1908 there were three such patients. Fiji maintains a segregation station on part of the Island of Beqa, 18 miles from Suva, which "is not of the nature of a hospital or asylum, but is more of a village settlement where the patients live in separate houses, three or four in each." St. Helena "is now erecting a stone cottage, with outbuildings, in an isolated district in which to segregate the leper child. . . The grandmother of the child has volunteered to be guardian and caretaker. Should more cases of leprosy occur, additional rooms could be built on to the original cottage as necessity demanded."

LIST OF LEPER INSTITUTIONS IN CROWN COLONIES AND PROTECTORATES.

Colony or Protectorate. Name of Instit	tution. No. of Beds.	No, of Patients at beginning of year 1908.	No. of Patients at end of year 1908.
Oyprus Leper Asylum, Malta Leper Asylum Sierra Leone Kissy Incurab pital (Leper	72 le Hos-	95 71 Average num- ber 6.	98 65 Average num- ber 6.

Colony or Protectorate.	Name of Institution.	No. of Eeds.	No. of Patients at beginning of year 1908.	No. of Patients at end of year 1908.
Southern Nigeria	Yaba Leper Asylum	24	21	16
S		(12 m., 12 f.)	(10 m, 11 f.)	(7 m., 9 f.)
	Onitsha Asylum	<u> </u>	29	27
Southern Rhodesia	Morgenster Asylum	Huts built as		6 (April, 1909)
D. L	G 1.TT :: 1.60	required.	4	
Bahamas	General Hospital (One male and one female	10	4	6
	ward set apart).			
Barbados	The Lazaretto	136	119	121
British Guiana	Leper Asylum	475	403	431
Diright Galanta	Hopor Hayram	(334 m., 141 f.)	(285 m., 118 f.)	(306 m., 125 f.)
British Honduras	Corozal Leper Hut	2	Nil.	Nil.
Jamaica	Leper Asylum	170	113	105
Leeward Islands	Rat Island, Antigua	50	37	32
	Fort Charles Asylum St. Kitts.	61	60	61
St. Vincent	Pauper Asylum (Leper part).	Accommodation for 20.		6 in 1908-9.
Trinidad	Leper Asylum	365	262	267
		(256 m., 109 f.)		
British North Borneo	Capuan Island	39	28	39
-Ceylon	Hendela	382	320	325
	Kalmunai	30	18	26
Hong Kong	C. I	See page		100
Mauritius	St. Lazare	200	$\frac{128}{10}$	129
Seychelles	Round Island Leper	Huts built	10	8
Straits Settlements	Asylum. Singapore Male and	as required.	20	32
intraits bettiements	Female Leper Asylums.	03	20	J.
	Male Leper Hospital	382	356	370
	Jerejak Island, Penang.	002	000	
	Female Leper Ward	17	13	15
	Jelutong, Penang.	1	20	
	Malacca Leper Asy- lum.	6	Nil.	Nil.
Fiji	Bega Leper Station		Avera	ge 36.

#### EXTRACTS FROM RETURNS.

#### CYPRUS.

REPLY TO LIST OF QUESTIONS RESPECTING LEPROSY.

The Office of the Chief Medical Officer, Cyprus, 1st June, 1909.

No special grouping, cases being found with equal frequency on the littoral

and inland.

2.—(a) Race—no difference, Moslems and Orthodox Christians being affected practically equally in proportion to their respective population.

(b) Soil—no information.

(c) Food—it is currently believed by the Cypriots that the use of olive oil in quantity as a food results in leprosy (especially the anæsthetic variety), and in support of this it is a fact that the villages of Akanthou and Lapithos (the chief oil-producing villages of Cyprus contribute more lepers than do the other villages in proportion to population. It is a fact worthy of note that Moslems, whose religion forbids the use of pork, suffer from leprosy in practically the same proportion to population as do the pork-eating Orthodox Christians.

Children born in the Leper Asylum are removed as soon as possible and lodged in a house in Nicosia town, where they are clothed, educated, the girls taught weaving, &c., and the boys helped to acquire knowledge of trades. There are nine children there at present, the oldest 14 years of age, and none of them have so far shown the slightest sign of leprosy.

#### GIBRALTAR.

#### DR. TURNER to COLONIAL SECRETARY.

COLONIAL SECRETARY,

I have met with only three cases of leprosy in Gibraltar during the past 27 years, and had there been other cases I think they should have come to my notice.

Two of these cases were Spaniards, and after they had been diagnosed they

were excluded from Gibraltar.

The third case is somewhat remarkable. It occurred in a man who was native of Gibraltar, and who had been an inmate of the lunatic asylum, suffering from

imbecility for 19 years before he became affected with leprosy.

The causation, therefore, in this case was very mysterious. The inmates of the lunatic asylum live under the most perfect hygienic and dietetic conditions, and have no communication with the outside world, except a fortnightly visit of half an hour from one or two relatives.

The patient was admitted to the asylum in 1883, became affected in 1902, was diagnosed in 1903, and died in 1906. The characteristic bacillus lepræ was found

in the hypertrophied tissues of the face.

All available means were used to obviate anything like contact with other inmates of the asylum. Clothes and washing materials, feeding utensils and bedding were kept apart. Patient slept in a separate dormitory, and remained apart from the others during the day. He was not allowed to handle anything that would be handled subsequently by others. His washing was done separately in a separate copper.

The case seems to favour the theory that leprosy can originate de novo, yet it is true that the inmates of the lunatic asylum, prior to the occurrence of this case, had

once a week a ration of dried cod fish.

WILLIAM TURNER, M.D.,
Medical Officer, Lunatic Asylum.

27th March, 1909.

#### MALTA.

#### REPLIES TO QUESTIONS.

The following facts have been ascertained with regard to the 66 male lepers kept at the Leper Asylum:—

Race.—All the lepers belong to the Maltese lower classes.

Heredity.—Thirty cases admitted the existence of leprosy in their family history.

Food.—Forty-three patients used salt fish as one of their principal articles of food; 18 occasionally used salt fish; four never used it; and one used it very rarely.

Of the 30 cases with a family history of leprosy, 21 used salt fish, seven used it occasionally, and two never used it.

Twelve female lepers are kept at the Hospital for Incurables at their own request. The following facts have been ascertained with regard to them:—

Heredity.—Six admitted the existence of leprosy in their families.

Food.—Eight used salt fish as one of their principal articles of food, whilst four never used salt fish.

Of the six female lepers with a family history of leprosy, five used salt fish.

#### GAMBIA.

Sir, Lamin, April 27, 1909.

In answer to your enquiries re the occurrence of leprosy in the Protectorate,

I have the honour to forward you the following notes:—

Lepers are met with all over our Protectorate; I should think that there is at least one in every town of any size. As far as I know, the disease is not more common in one district than in another.

The nodular form of the disease is the more usual.

The natives make hardly any attempt to isolate lepers, though many understand that the disease is contagious. A leper, as long as he is able, goes along his

ordinary business, and lives with his family and wives, who, however, often desert him, not so much apparently from dread of the disease as on account of the loss of

sexual power, which sooner or later supervenes in course of the disease.

Such a leper, however, especially if of the better classes, generally takes his food from a separate dish to other people, and does not offer to shake hands with any one without first covering his hand with his gown, but otherwise until bedridden and crippled his disease appears to be no hindrance to his ordinary social and business duties.

The natives recognise the disease as incurable, and although in the first year or two I was here a certain number came to me in hopes of some cure, I have had to tell them so often that I have none, that now I see very few lepers as patients, unless they come for some intercurrent trouble.

I have never known a case of hereditary (real or apparent) transmission of the disease, but have come across one or two cases of a wife being infected from her

husband.

The connection between fish-eating and leprosy in this country obtains no proof or the reverse, as although the people near the sea probably eat more fish than elsewhere, there is a large trade all up the river in dried fish, which is one of the favourite relishes for the natives' ordinary dishes of rice or meal.

I have, &c., Emilious Hopkinson,

Protectorate Medical Officer.

The Senior Medical Officer, Bathurst.

#### GOLD COAST.

Cases more common on the littoral than inland, but supposed to extend inland

along the Volta River, which is used greatly as a trade route.

The natives adopt a form of segregation, sending cases to separate huts, sometimes some distance away in the bush. No asylum for lepers exists. Such an institution would not be of use for anything than a fraction of the cases in existence; there would be great difficulty in effecting the transport of the cases, and probably the effect of establishing such an institution with compulsory segregation would be to lead to concealment of the disease.

The natives are quite alive to the necessity for segregation, and, as far as I can

judge, adopt it in nearly every case when the disease is once recognised.

#### NORTHERN NIGERIA.

THE GOVERNOR to the SECRETARY OF STATE.

(Extract.)

Government House, Zungeru, 22nd April, 1909.

The Principal Medical Officer, Dr. Thompstone, C.M.G., has replied as fully as possible to the list of questions enclosed therein, which I now have the honour to transmit. Dr. Thompstone also states: "It is impossible to say how many lepers there are in the Protectorate. Many cases are seen sitting begging on the outskirts of the large towns in the interior. They are under no systematic supervision, but where numerous are often known to form voluntary communities; they are not habitually sent out of the towns."

### BASUTOLAND.

All the cases are inland. They are widely scattered through the Territory; about 40 per cent. occur as isolated cases in different villages. One village contains 12 lepers, one 8, two 7, one 6, three 5, thirteen 4, fifteen 3, twenty-nine 2. In fully 60 per cent. of the recorded cases is there undoubted evidence of contact with other lepers.

E. C. Long, Principal Medical Officer. An Enquiry into the Local Prevalence of Leprosy in North Basutoland.

By N. M. Macfarlane, M.D., Leribe, Basutoland.

(A paper read before the South African Medical Congress.)

Mr. Jonathan Hutchinson, in his book on leprosy and fish-eating, remarks:—
"My general conclusion is that leprosy in South Africa will always be found in ratio with the salt fish eating habits of the population, and that the latter depend upon facilities for supply, ancestral habits, and the existence of a large native population in a condition of dependence for maintenance upon the whites. To this it must be added that it is reinforced in certain native districts by a few cases caused by commensal communication—that is, by food taken from lepers' hands. It seems, however, very doubtful whether the latter is a sufficiently powerful source to maintain the disease for more than one or two generations in the absence of the food cause."

Now, I hope in the following short paper to show that leprosy has nothing to do with salt fish eating habits of the Basuto, that there are little or no facilities for the supply of that commodity, that their ancestral habits are against fish eating, and that we have a large native population practically independent of the whites.

It will be shown, however, that the disease spreads from one person to another, and from one place to another by contagion or by what he chooses to call commensal communication, and that the causes have been sufficiently powerful to maintain the disease for more than two generations, and to aid its spread to an alarming extent—so much so, that the native has been shaken out of his lethargy, and Chief Jonathan, in Leribe District, has been forced by his people to make provision for an agricultural colony to which all his lepers can be sent.

During last month I have personally interviewed all the lepers in the northern district of Basutoland, and have been able to get some interesting histories and many important facts. Although I began my inquiries with an open mind in regard to the fish hypothesis, I must say now that I cannot find the least connection between the two, and all the evidence in my possession points to its spread by contagion, *i.e.*, touch, clothing, breath, or food. This is also the belief amongst the natives, and they point to many cases in corroboration of it, and the present movement for a colony is the practical application of this belief.

The Basuto, like the other Bantu peoples, have no name for leprosy, which would point to the disease being of recent origin among them. Dr. Weir, of Engcobo, thinks it is indigenous, and that a fresh wave of the disease was started by contact with Hottentots. There is something to be said for this, as we know that up to a hundred years ago the natives were not settled as we know them to-day, but were more or less nomadic and constantly at war one tribe with another, so that the unfit and the diseased had to go to the wall, and, in this way, a scourge like leprosy had no chance of gaining any foothold in a tribe or nation. But still, there is the objection that they have no native name for it, and to me this is a strong proof that it is of recent origin among them, as, had it been endemic, a disease with such marked characteristics as leprosy would have been distinguished by a name. It is only when the tribes settle down in one part of the country and get prosperous that we have evidence of the disease, and this is especially true of the Basuto. It is about seventy years since leprosy was introduced into Basutoland; and, as regards the northern part of it, all my information points to the disease having spread from one part. This part is Mequatling, Modderpoort and the Plaatberg behind Ladybrand.

The Bataung tribe of the Basuto were living there under Molitsane and Ramochele, and scattered among them were the people they called Baroa, comprising Bastards, Bushmen, and Hottentots, who had come there some time previously from Phillipolis, and were people under the Bastard Chief Corolos, whom Moshesh had made vassal. These "Baroa," as they called them, had leprosy, and from contact with them, and intermarriage, the disease attacked certain Basuto, who through war and other causes were driven into Basutoland proper. It is from these immigrants that the disease has sprung.

This will be reverted to later on, but meanwhile the following statistics will embody my views, and show in a graphic manner my contentions:-

TABLE No. 1. Table showing number of Lepers in Leribe District.

	Males.	Females.	Total.
On Register July, 1903	44 22 4	30 13 2	74 35 6
Total remaining on Register August, 1906	62	41	103

The population of the district is 85,000, and the number of lepers at present on the register would work out at slightly over 12 per 10,000. The increase in three years has been at the rate of a little over 47 per cent. I do not know how this compares with other districts in Basutoland, as the figures for them are not available at the time of writing.

In 1895 the total number of lepers in the whole of Basutoland was 148, which

gave about 7 per 10,000 of the population as affected.

As regards sex, it will be noticed that the disproportion between them is not great—six men to four women. The usual proportion is given as two-thirds men to one-third women.

TABLE No. 2.

Tabl	e showing	the fo	rm of .	Lepros	y.
hetic le	prosy				

Anæsthetic leprosy		 	 	71
Tubercular leprosy	• • •	 	 	29
Mixed leprosy	• • •	 	 	9
1 0				
				109

The number showing the anæsthetic form is larger than usual. This may account for the small number of deaths, 8 per cent. in three years.

TABLE No. 3. Showing Age Incidence.

Age.		Males.	Females.	Total.
5 to 10 years		 5		5
10 to 15 ,		 5	8	13
15 to 20 ,,	•••	 2	5	7
20 to 25 ,,		 13	4	17
25 to 30 ,,		 15	10	25
30 to 35 ,,		 7	1	8
35 to 40 ",	•••	 9	2	11
40 to 45 ,,	***	 6	5	11
45 to 50 ,,		 4	5	9
50 to 55 ,,	•••	 _	2	2
55 to 60 ,,		 	_	
60 to 65 ,,		 _	1	1

This explains itself and requires no comment.

TABLE No. 4.

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Table	showing	hom	I ammagai	ande de	annead
1 (1)(1)(6)	sucum tuu	HOUW.	116010000	www we	auteu.

	•	£.	•	-4.			
Both parents lepers							
One parent leper				• • •			27
Blood relations, other th	nan pai	rents	• • •	• • •	•••	• • •	39
History of contact with	other I	epers		• • •			
No history of heredity of	r conta	ct				'	19

This is a most interesting table. Out of 109 cases, only 19, or 17 per cent., could not explain how they got the disease. The exponents of heredity might say that this table upholds their theory, as nearly seven per cent. had both parents leprotic, 26 per cent. had one parent, and 35 per cent. had blood relations affected. I do not think that heredity has much to do with it, as too many members of a family escape.

Hutchinson states that it is rare for a husband and wife to be both affected. Amongst the cases in this register, I have noted eight instances where both were

affected, which works out at about seven per cent. of the total.

# TABLE No. 5.

Showing number of Immigrants and of those who had worked for varying periods outside Basutoland.

	Male.	Female.
Immigrants Residents of Basutoland, who had worked beyond the Territory mostly in the Transvaal and Orange River Colony.	$\frac{4}{22}$	$\frac{5}{4}$

It will be seen from this table that about eight per cent. were immigrants. In every case they had contracted the disease after coming to Basutoland. Of the number, two were Zulus, five were Basuto (four from Orange River Colony and one from the Transvaal), one Bastard from Cape Colony, and one Baralong from the Orange River Colony. Only about 25 per cent. ever worked or resided outside

As regards eating fish, I find that 72 denied ever eating fish and 37 acknowledged having eaten fresh fish or sardines. The 72 were most emphatic and their statement is to be believed, as the natives of the territory are, as a rule, not given to fish eating Very few eat river fish, they are too troublesome to catch; but when eaten they are fresh. Of the 37, most of them had eaten sardines—they do not habitually eat them, but occasionally as a luxury. The whites in Basutoland also eat sardines in considerable quantities and there is no leprosy amongst them.

As regards salt fish, it is and has been unknown in the country. The Boers in the Orange River Colony do not import or eat salt fish, and I have

it on good authority that the trek Boers, who first colonized the country, did not bring salt fish with them and did not import it after they had settled down, hence they could not have fed their servants on it. The conditions were all against fish, and the country they traversed and occupied swarmed with game of all kinds up to within recent years. Being a pastoral people, as also are the Basuto, their herds sufficed for food.

I have enquired of all natives who have worked on the mines and they never

heard of or saw salt fish there.

All the authorities I have consulted are uncertain as to how the disease pro-

pagates itself. Most of them favour contagion, and certainly what evidence I have been able to get from the lepers in the district goes to prove this.

Before, however, I cite cases in proof, I should like to show how the disease spread from the Platberg to Basutoland. I have already pointed out how certain Basuto, who were living with the Bastards and Hottentots there, came to Basutoland about 1842. In one instance, a man named Ramatlapeng and his family, who were lepers, were driven to Berea, the district of Basutoland opposite the There were nine lepers amongst them, and from them the disease spread northwards to Peka, where five of the present cases can be traced to them, to Leribe where six cases originated from them, and to Joel's and Letsika's where, in all, over 20 cases are due to them.

In another instance, a leper Zulu doctor infected a family, and, subsequently, many people living in a village at Sebetoane. Five survive now, and to my knowledge about a dozen have died within the last ten years.

Another man also came from Modderpoort to a place near Peka, and from

him can be traced nine cases.

Time will not permit me to go into this more fully, but enough, I think, has been brought forward to prove my contention.

As regards contagion, I should like to cite the following instances out of many which seem to me to be conclusive. In the mountains near a cattle post belonging to one of the chiefs, there lived a leper named Maapeha who died of the disease, leaving behind a young widow. After his death the chief's brother went to the cattle post to build a house, and six followers went with him to herd the stock. They all occupied Maapeha's hut for about nine months and shared the widow. The chief, hearing of it, turned the widow and her family out of the country. Since that time—1895—the chief's brother and the six men have all developed leprosy. In no case is there any history of heredity. The woman was not a leper at the time, and having left the country I cannot say what she is now.

In another instance a woman came from an infected village at Berea to Sechele's, in Joel's ward. She developed the disease after marriage, gave it to her husband and two children, and from her and her family six other cases in the village can trace this disease. From this village a chief took a wife to Letsika's ward. Two of his children have developed the disease, and from them

several other cases have originated.

At Rampae's village there is a leper woman who got the disease from her mother. Her husband took the disease from her. At the age of 65 the husband's mother contracted the disease, and now a daughter of the husband by another

wife has developed it.

In another, and last, instance a woman took in the child of a brother-in-law to live with her. This child developed leprosy, and the woman's eldest daughter took the disease, and then the woman herself, and lastly a second daughter shows signs of it.

These cases are difficult to explain in any other way than by contagion, and

certainly fish played no part in them.

In conclusion, let me summarize—

1. Leprosy is spreading and increasing rapidly in Leribe District.

2. It can mostly be traced to Mequating, Modderpoort, and the Platberg. 3. The Basuto have no name for it except "Lefu la Baroa" (the Hottentot's

disease).

4. Until seventy years ago they were living isolated from any possible source of infection, and it was only after coming in contact with the Bastards and Hottentots of the region I have named that the disease was detected amongst them.

As a rule they are not fish eaters, and if they do eat fish, it is fresh or sardines, and then only as a luxury, and not as an article of diet. Salt

fish is not sold in the country.

6. Their habits are such as to render them liable to contract the disease by contagion.

7. There has been no segregation.

#### BECHUANALAND PROTECTORATE.

My experience in the Protectorate, extending over five and a half years, includes

only two cases of leprosy—both in the southern districts.

I have no record of the history of the first case, a girl from the village of Molepolole, who came here to see me four years ago; the second case—that of a girl from Kuma a Kwane, a village some twenty miles away—was brought in a month ago. She is 17 years of age, and, although she has lived most of her life in the Southern Protectorate is in reality a Mangwato, having been born at Palapye. Possibly she may be thus connected with the fish-eating tribes of the north, of whom some occasionally marry into the Bamangwato tribe (Khama's people); but on this point it is at present impossible to make any positive statement.

From information collected by me at various times, it would appear that cases of the disease are not infrequent among the Makoba tribe, who inhabit the Okovango marshes of the Lake N'gami district, and whose food for at least six months in the

year is largely supplemented with fish-both fresh and dried.

The part played by diet in the causation of the disease will, I presume, be the subject of a good deal of discussion at the forthcoming conference; on account of the startling prominence given it a few years ago by the declaration of one of the greatest of living authorities. in a particular branch of specialisation, namely, Sir

Jonathan Hutchinson, who stated his belief that leprosy was due to the eating of

improperly cured fish.

If I remember rightly, Sir Jonathan visited South Africa in connection with his researches, and specially alluded in his observations to the proneness of the natives of the lake and river regions of Africa to the disease. The general remark that large quantities of improperly cured fish sent from the coast inland for native consumption is responsible for the disease connotes that the influence of locality is merely considered in its particular relationship to this food supply.

The quantity of cured fish imported into the Protectorate is so small—mostly confined to what is required for private consumption—by traders and some other residents—that it cannot affect such a question as this at all. From my own particular knowledge of it, in respect to curing and preservation, it does not seem inferior to many varieties of cured fish at home and elsewhere; it is not only salted,

Among the Bechuanas, from Khama's people southwards, fish is only a rare and vacarious article of food. They are not fond of it, and eat it from necessity rather And then fresh from the streams and pools of the country. these are dry for the greater part of the year, the quantity of fish consumed annually is so inconsiderable that it may be left out of view as a food factor.

With regard to the Makoba, they are said to be the aboriginal inhabitants of the marshes they now occupy—with what degree of probability or truth it is impossible to say. They eat their fish either fresh or after it has been dried in the sun; I am told that dried in this way it is as free from putrefactive taint as meat preserved similarly, that is "biltong."

If leprosy is due to the eating of improperly cured fish, it is not easy to understand how many parts of the British Isles—and other countries where the disease is rare or unknown—have not long ago become uninhabited wastes, or segregated communities of lazar houses and such Plutonian horrors as are generally associated with them. The question is a much more complex one.

With regard to the prevalence of the disease in this country, as bearing upon controversial and other points, the occurrence of a few sporadic and even endemic cases does not appear to lend strong support to any exclusive theory as to its

aetiology.

D. M. MACRAE, M.B.,

Medical Officer, Bechuanaland Protectorate Government. Gaberones, 12th April, 1909.

#### SOUTHERN RHODESIA.

Medical Director's Office, Salisbury, 29th April, 1909.

The majority of cases occur in the districts abutting on the Zambesi Valley and in Victoria and its sub-districts in the south-east of the territory.

The causes of the increased number of cases in these districts have not yet been sufficiently studied to enable me to supply a statement which would be of any benefit;

it could only be conjectured.

Notification cannot be said to be compulsory. With a large native population and a small European, such as we have here, it would be almost impossible to Natives know the disease and its tendency to spread, and as a rule avoid living with the affected, and inform the Native Commissioners. Native Commissioners report all cases known to them direct to the Government, and periodically render a return of the lepers in their several districts. It is probable that almost all the cases are notified.

The cases are generally fairly advanced and evident before being brought to the notice of the Government. In the earlier stages, when confined to anæsthetic patches, the sufferers undoubtedly endeavour to conceal, or may be unaware of the

nature of, their infirmity.

Compulsory segregation in an asylum is not enforced. A voluntary asylum is kept by the Dutch Reform Mission at Morgenster, Victoria, and financed by the Government. It is under the direct control of the Medical Officer to the Mission. Natives unwilling to go to Morgenster are segregated in their own districts under the care of the Native Commissioner. Where there is a District Surgeon, these cases are seen and treated by him.

It is impossible to say at present whether the This system is temporary.

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disease is increasing or decreasing in the territory. From native reports, it would appear to be decreasing.

Separate huts are erected as required for the inmates. There are at present

six lepers segregated there.

A. M. FLEMING,

Medical Director.

#### EAST AFRICA PROTECTORATE.

Very little is known about leprosy in this country. Such cases as come under observation are confined to the coast. Presumably inland cases are imported ones. In 1907 there were two cases in Nairobi—soldiers who had arrived from the Nyasaland Protectorate some months previously. The Arabs would appear to practise a system of segregation of their own accord. They are shy of reporting cases, and generally isolate their cases in the bush.

It is hoped that when the Government leper establishment is opened that more

reliable data may be obtained.

### A.—Number of known cases.

Jubaland.—Nil.

Tanaland.—Twenty-two cases in Government Leper Village, situated 25 miles from Lamu in absolute isolation. Patients do not leave village, are fed by Government, and do a certain amount of farming.

Malindi.—Fourteen cases in vicinity of this station. The leper colony for-

merly there no longer exists. Seven of the above cases live in one village.

Rabai.—Six cases are definitely known to exist in this district, and the presence of others is suspected.

Mzizima.—Eight cases under control.

Chonyi.—Two eases have been seen (uncontrolled).

Teita.—Two or three cases have been observed here (uncontrolled).

Mombasa.—According to native account, some 50 cases exist here, but one does not see them.

Shimoni.—Six cases exist, all of which are isolated at least five miles from each other and are living in isolated huts in the bush about 20 miles to the S.S.W. of Vanga and about 10 miles to the east of the Anglo-German boundary.

#### B.—Distribution.

Both littoral and inland (Teita is about 100 miles from the coast).

Principal Medical Officer.

Nairobi, May 11th, 1909.

## NYASALAND.

By far the large majority of cases are met with on the shores of the lakes and

on the banks of the Shiré river, and but comparatively few inland.

The disease is said to be most prevalent among people engaged in catching and curing fish (by drying), and who trade in this commodity. Thus a large proportion of the lepers have been observed round Lake Chilwa, and as to "grouping of cases" the majority of these appear to live on Chisi Island, in that lake.

The disease is more prevalent among certain tribes than others. The Chikunda, Anyanja, Anguru, Atonga, Chipeta, Achewa, and Wakonde furnish most of the cases, whereas among the Yao, Angoni, and Awemba leprosy is but seldom seen.

It would appear that natives attach some importance to humidity of the soil as an etiological factor, and believe that people who live in huts erected on damp soil are liable to develop the complaint. On the lake the vast majority attribute leprosy to the water they drink. They attach little or no importance to contagion, and it is said that among certain tribes, the Chipeta, for example, it is not uncommon to find a leprous man living with a healthy woman, and vice versâ.

As regards diet, there is a general concensus of opinion among Europeans that

leprosy is most prevalent among the large consumers of fish-more especially of imperfectly-cured fish. The natives, on the other hand, do not incriminate this dietary

Some stress is laid by one or two observers on the possible connection between the disease and the filthy habits and insanitary condition of the dwellings and surroundings generally of certain tribes who are especially subject to this complaint.

H. HEARSEY,

Principal Medical Officer.

#### UGANDA.

Chief Secretary,

Leprosy has been very little met with in those parts of the Uganda Protectorate which have hitherto been administered by means of stations. Personally I have not seen half-a-dozen cases in 11 years in Government stations. The disease existed to a slight extent among the Sudanese and their followers, who were brought into Uganda via the Congo, but it appears to have died out.

There appears, however, to be a centre of infection somewhere in that part of the Protectorate east of the Nile Valley, and between Busoga and the Abyssinian

border, an area of which at present very little is known.

In the southern part of this area, which is essentially an inland one, cases of leprosy are frequently met with, and the disease is said by natives to be commoner further north. It is probable that the cases which have been occasionally met with in other parts of the Protectorate have originated in this area.

Seven cases of leprosy were returned as occurring in Uganda Protectorate during 1908, with one death.

No measures exist for the notification or segregation of leprosy, but the disease could, I presume, be dealt with under the Dangerous and Infectious Diseases Ordinance.

No hospital or asylum for leprosy exists in the Protectorate, but I understand that the Church Missionary Society is projecting a medical station with hospital and leper asylum in the near future in the neighbourhood of Kumi, the newlyopened station on the southern confines of the infected area referred to above.

> A. D. P. Hodges, Principal Medical Officer.

Entebbe,

30th June, 1909.

BAHAMAS.

"Mainly fish diet."

#### BRITISH GUIANA.

The disease is fairly uniformly spread over the inhabited part of the Colony bordering on the sea shore and river. It is not, as far as I am aware, found in the interior among the aboriginal Indians.

I am of opinion that the disease is contagious, and that neither soil nor food has any relation to its distribution. The East Indian and black races constitute about nine-tenths of the population, and in these cases the proportion of those affected is practically the same.

Cases are as a rule not notified until the disease has made a considerable

Undoubtedly there are a good many cases which are not reported

J. E. Godfrey,

Surgeon-General.

15 May, 1909.

#### JAMAICA.

I have the honour to present the following report on leprosy in Jamaica to the Second International Conference on Leprosy to be shortly held in Bergen, Norway, under the distinguished presidency of Dr. G. Armauer Hansen, Director of Leprosy, Norway.

The number of known cases is given as the admissions to the Leper Asylum from 1897.

		Year.			New Cases.	Deaths.	Remaining.
1897	•••			•••	31	16	106
1898 1899	•••	•••			35 15	13 20	127 118
1900	•••				21	20	122
1901 1902	•••	•••	•••	• •	18 7	$\begin{array}{c} 15 \\ 14 \end{array}$	120 110
1903	•••	•••	•••		1.6	17	108
1904 1905	•••	•••	•••		32 23	20 23	$\begin{array}{c c} & 117 \\ & 114 \end{array}$
1906	•••	•••	•••		16	14	115
1907 1908	•••	•••	•••	•••	$\begin{array}{c c} 13 \\ 12 \end{array}$	$\begin{array}{c} 15 \\ 14 \end{array}$	113 105
1200	•••	•••	•••	•••		~~	100

My predecessor, Dr. J. F. Donovan, presented a report on leprosy to the Berlin Conference in 1897.

I was appointed as Medical Superintendent of the Jamaica Leper Asylum in August, 1898, and I have prepared a report on the admissions of new cases from that date to the 31st March, 1909. A map\* has been prepared which demonstrates the localities where the disease has been acquired, males marked in red, females in blue.

Geological Formation of Jamaica.—This can only be summarized.

County of Surrey.—The coast formation is white and yellow limestone, the interior consists of metamorphosed and trappean with carbonaceous shales and conglomerates. In St. Andrew purple shales and conglomerates occur to a considerable extent. At Hope, galena is found with caledonite. On the north side at Low Layton, exist the traces of an extinct volcano, which is supposed to have been active before the close of the pliocene period.

County of Middlesex.—St. Mary exhibits a great diversity of formation, consisting of limestone, marls, sandstone, conglomerates, and, in a small area, igneous formations. In St. Catherine the formations are more limited. Calcareous and igneous rocks prevail. A vast alluvial deposit covers a great area, and is a continuation of the alluvial plain of Liguanea, St. Andrew. In North Clarendon, metamorphosed trap rocks and conglomerates prevail. In the Vere district there is an alluvial flat consisting of 132 square miles. This is the largest continuous flat land in the island. Manchester and St. Ann consist principally of limestone.

County of Cornwall.—St. Elizabeth consists of limestone, with an extensive alluvial area. The Nassau Valley is an extensive flat in the north-east part of the parish. Westmoreland consists of extensive alluvial deposits and marl beds. Northwest is found trap rocks and yellow limestone. The "black grounds" of Trelawny consist of the debris of the trappean series of shales and conglomerates. The parish consists principally of limestone. The Queen of Spain's Valley is a very large expanse of alluvial deposit. St. James consists of trap formation, with yellow limestone and cretaceous marls. Alluvial deposits exist around the coast. Hanover consists chiefly of white and yellow limestone, black shales, with metamorphosed rocks.

The question of soil is not a factor in the ætiology of leprosy in Jamaica. There are cases occurring on all variations of geological formations, including porphyritic and other igneous rocks, cretaceous and conglomerate deposits, marls, clays, sandstone, and gravel.

With reference to Jamaica I can safely state that climatic or telluric influences, hygienic conditions, habits, food, or water supply have nothing to do with the causation of leprosy. Quite as many cases are admitted from the interior as the littoral, from high elevations as from the lowlands. There are certain localities where leprosy does not occur. Cases have been admitted from the littoral as follows:—Kingston and Port Royal, Montego Bay, Port Antonio, and Alligator Pond.

From long distances from the sea-board:—Mandeville, Chapelton, Bull-head, and Ulster Spring.

From high elevations:—Norway, 3,000 ft.; Christiana, 2,563 ft.; Ballynure, 2,150 ft.; Mandeville, 2,130 ft.

Those affected are principally the negroes and coloured population. Amongst the white, certain Jewish families are leprous. A few East Indian immigrants suffer, apparently not in the same proportion to those indentured in Trinidad or British Guiana.

A glance at the map will demonstrate the fact that singularly few admissions have been made from Hanover, Westmoreland, Portland and St. Thomas, the four parishes at the extreme east and west of the island.

From the county of Surrey there are 30 admissions, being a rate of 1.65 per 10,000 of the population and one leper for every 25.5 square miles.

From the county of Middlesex we received 97 lepers, a rate of 2.59 per 10,000 of the population and one leper for each 19.8 square miles.

From the county of Cornwall 32 lepers were admitted, a rate per 10,000 of population of 1.14 and one leper for every 47 square miles.

The Blue Mountains divide the island in its extreme length into the north and south sides. The north side, with an area of 1,729 square miles, gives 47 lepers, equal to one leper for every 36.8 square miles. The south side, with an area of 2,463 square miles, gives 112 lepers, being one leper for every 22 square miles. This is interesting, and requires further investigation and research.

It must not be forgotten that these admissions cover a period of nearly 11 years, and the results of the figures show that leprosy is no longer a serious matter for Jamaica.

I do not think that any focus of infection exists in Jamaica. I gather this from the isolated cases admitted to the asylum, and from enquiries submitted from time to time to Inspectors of Police and District Medical Officers.

Immigration.—It does not appear to me that sufficient attention is paid to this subject as one of the causes by which leprosy is increased in any country. In the year 1854 472 Chinese immigrants were introduced in Jamaica, principally from Colon, where they had been working on the Panama Railway. Several of these, broken-down and destitute, died of leprosy at the Healthshire Asylum. A small number of East Indians suffered from leprosy shortly after their introduction. The table of admissions for the past 11 years shows the number of Jamaicans who have acquired the disease in Colon and Central America.

Notification of Cases.—The disease is not notified under the Compulsory Notification Act. The malady is dealt with under a special law to be referred to later.

Segregation.—The first leprosy law passed in Jamaica was 28 Victoria, Chapter 13 (Law 13 of 1865). Provision was made for the establishment of asylums for dealing with leprosy and kindred diseases.

A leper settlement was built on the Healthshire Hills, in a locality most inaccessible during the rainy seasons, either by land or sea, and one existed also at Montego Bay.

The present asylum was completed in 1877, and the inmates from Montego Bay and Healthshire were transferred that year.

A new law (17 of 1879) was introduced, repealing that of 1865, and an attempt was made to deal with the vagrant nomadic leper, whose period of detention by order of a magistrate was not to exceed 28 days. In addition, so-called kindred diseases of leprosy were treated, and it is well for the colony that leprosy, if infectious, is only so to a limited extent, as the conditions which obtained were such as to make the asylum a prime focus of infection.

See Report 1899, and reference to treatment of Framboesia and other diseases.

The introduction of the present law (Law 15 of 1896) was due to the representations made by my predecessor, Dr. J. F. Donovan, as to the necessity of dealing with the itinerant destitute leper and those who engaged in various occupations or trades, and now compulsory segregation is enforced on the indigent class.

The law was published in the Transactions of the Berlin Leprosy Conference, 1897.

A synopsis of admissions from the 1st August, 1898, to the 31st March, 1909, showing the salient features of each case has been compiled from my case book, and is attached in the Appendix.\*

### Admissions, Jamaica Leper Asylum.

Parish.	Males.	Females.	Total.
St. Catherine	16	10	26
Manchester	 13	13	26
Clarendon	 16	6	22
Kingston and Port Royal	 9		18
Trelawny	 11	9 2 4 3	13
St. Mary's	 8	4	12
St. Ann's	 8	3	11
St. Elizabeth	 8 3		9
St. James	 3	1 5 2	8 6
St. Andrew	 $\overline{4}$	2	6
St. Thomas	 4	_	4
Portland	 1	1	2
Hanover	 	1 1 1	4 2 1
Westmoreland	 	1	1
FOREIGN COUNTRIES.			
Colon	 9	1	10
Central America	 4 3	$\frac{1}{3}$	7
India	3	_	3 1
Haiti	 	1	1
St. Thomas D.W.I	 	1	1
	117	64	181

From 1st August, 1898, to 31st March, 1909.

W. D. Neish, Medical Superintendent.

Lambs River District,

Sir,

Medical Office, 20th May, 1909.

I SUBMIT herewith the information asked for in the form respecting leprosy as it applies to the Lambs River Medical District.

- A.—Number of known cases of Leprosy.—No record has been kept by me of the cases of leprosy in the Lambs River District. Since becoming the Medical Officer of the District no case of leprosy, public or private, has come to me for treatment. I thus cannot give accurately the number of cases of leprosy formerly or at present existing in the Lambs River District.
- B.—1. The disease is confined to one single spot in the whole district under my charge. This is the Seaford Town locality. There has always been a number of cases of leprosy in this place for the past ten years to my knowledge, and possibly much longer.
- 2. The leprosy patients in this Seaford Town district are Germans of pure blood, a colony of artisans of that nation having been brought hither from some German State by Lord Seaford as an industrial experiment. With a few very rare exceptions they have refused to intermarry or cohabit with the negroes. I am not aware that there is any Semitic strain in their blood either. They have lost their language and a few of their national customs, but they still preserve all the essential characteristics of their race. They are industrious, sober, and vigorous, but the district where they live, while very fertile, is at the bottom of a valley, and is hot, humid, and depressing. The soil is a yielding red earth. Drainage is difficult. There is much standing water, decaying vegetable matter, bogs, steaming morasses, and the quantities of insects which these conditions and the absence of powerful wind currents favour. While maintaining a much higher standard of living and of morality than their black neighbours, they are not an enlightened community, and their domestic arrangements are not of the most wholesome. Personal hygiene is neglected; a rather unknown salt fish in brine and dry salt fish (imported from Newfoundland, where leprosy is also prevalent) form, with starch foods, the main part of their diet. Fresh fish also, brought up by hucksters from the coast, 15 miles distant, and more or less soiled by careless handling, stale, or tainted is constantly being sold among them.

C.—Notification of Cases.—1. No cases have been officially brought to my notice by either a patient, the friend of a patient, the Inspector of Poor, or the constabulary. I recently advised that one case should be sent to the Leper's Home at Spanish Town, but the persons concerned refused to entertain the proposal, and with some spirit questioned the right of any authority whatever to forcibly segregate a leper, provided his family were willing to attend to him and keep him out of sight, and this is what is being done in this Seaford Town colony. The relations of the lepers attend their cases themselves and keep them out of sight. If a surmise based wholly upon hearsay is of any value I should say that there might be between twenty and thirty lepers at present afflicted with the disease in that place.

I have, &c., E. H. B. Stafford, District Medical Officer.

The Superintending Medical Officer, Kingston.

#### LEEWARD ISLANDS: ANTIGUA.

The Presidency consists of the Islands of Antigua, Barbuda, Redonda. Antigua, 108 square miles; Barbuda, 62 square miles; and Redonda, 1 square mile. The cases of leprosy are evenly distributed. There are no facts bearing on the possible relation on the distribution of cases. The population consists of black, coloured, European, and a few Chinese.

#### ST. KITTS-NEVIS.

Negroes and Portuguese immigrants principally affected; the latter exist largely on salted (imported) fish.

#### TRINIDAD.

#### Distribution of Cases.

- 1. It is difficult to make a definite statement, for the following reasons:—
  - (a) The majority of cases on record have occurred among the unskilled labouring and vagrant classes—classes of the population who have no fixed residences.

(b) Even when districts or villages are situated on the coast the people chiefly engage in agricultural work.

- (c) A large number of cases come under notice in Port of Spain (the chief town and port of the Island), but in most instances these were vagrants or mendicants, and not residents. It is of interest to note that in regard to the following four districts, viz., Toco, Mayaro, Bocas, and Cedros-Erin which may be classed as strictly "littoral," cases have been returned as occurring in the last-mentioned districts only. In view of the above facts it would appear the cases of the disease must be classed almost entirely as "inland."
- 2. Race.—Among natives cases occurred more frequently in black and coloured people. East Indians, i.e., natives of India, contribute about 40 to 50 per cent. of the admissions to the Leper Asylum. It must be noted, however, that cases of the disease occurring among this class of the population from poverty and other causes are more liable to come under notice.

Soil.—No relation has been discovered.

Food.—The native labouring population in all parts of the Colony live chiefly on salted fish and meat (beef and pork) and vegetables; East Indians live on rice chiefly and are very fond of fresh fish (river or sea fish), but their opportunities of obtaining this class of food are limited.

In reply to a general circular, 5 per cent. only of the District Medical Officers note that cases which come under observation had largely subsisted on cured fish. It would appear, therefore, that local experience does not attribute any causal

relation to any special kind of food.

Segregation.—This is effected by detention in the Leper Asylum until discharged by the order of the Governor.

#### BRITISH NORTH BORNEO.

Leprosy appears to be almost entirely confined to the Chinese coolie class immigrants, whose main diet consists of rice, dried shark, fish, and vegetables. Type of leprosy both "mixed" and "nodular."

#### CEYLON.

#### Second International Leprosy Conference.

SIR, Medical Department, Colombo, Ceylon, 26th May, 1909. WITH reference to your letter, No. 337, of the 6th ultimo, I have the honour to submit the following report:-

There are two leper establishments in Ceylon—

- (a) The Leper Asylum at Hendela, situated a few miles from Colombo on the bank of the River Kelaniya, and
- (b) a portion of the Kalmunai Hospital in the Eastern Province.

Hendela Leper Asylum dates from the time of the Dutch occupation of this Island and has 382 beds. At Kalmunai there are 30 beds.

3. List of questions respecting Leprosy.—As figures are not available for all the years mentioned in Question A, I attach, as an appendix, copies of this information by provinces as furnished by the Provincial Surgeons, omitting a "nil" return for the North Central Province.

Some indication of the number of new cases from 1897 to 1908 may be obtained from a perusal of the admissions and deaths at Hendela and Kalmunai, although these figures do not represent all the cases known.

			New	Cases.:	1.	No. of			
	Year.		Hendela.	Kalmunai.	Total.	Hendela Asylum.	Kalmunai Asylum.	Total.	
1897			75	14	89	29	3	. 32	
1898			68	22	90	46	0	46	
899			65	18	83	45	3 3	48	
900			78	17	95	39	3	42	
901			79	18	97	43	3	46	
902			59	20	79	41	2	43	
903			72	22	91	83	2 2 3 2 2	85	
904	•••		105	26	131	58	3	61	
905	•••		91	32	123	74	2	76	
906	•••		90	21	111	67	2	69	
907	•••		84	7	91	66	1	67	
.908	•••		101	18	119	62	6	68	

A Leper Ordinance was brought into force in the year 1901, and regulations on this ordinance were published in July, 1902 (copies attached). The increase in the number of new cases during the last six years of the above return is likely to be the result of the working of this ordinance.

#### 4. Answers to Question B:—

- (a) The majority of the indigenous cases certainly come from Southern India. Those cases that occur inland are mostly on the estates and originally come from India with a history of having lived on the sea coast of the Madras Presidency.
- (b) All the patients have been Orientals and they all have lived on the staple food, viz., rice made into curry, with meat, vegetables, or fresh or cured fish. The majority of the patients have been Singhalese; this race is predominant—but all races of Ceylon are represented among the lepers.

There has been nothing noted with regard to the incidence of the disease and soil, or other conditions.

#### 5. Answers to Question C:—

- (a) Yes.
- (b) Cases are usually notified only when the symptoms are fairly well marked.

#### 6. Answers to Question D:

- (a) There is no disinfection carried out.
- (b) There is some attempt at segregation of the leper until he is removed to the Leper Asylum.
- (c) In the event of the leper not being removed to the asylum and allowed home isolation under the conditions set out in Regulation 3, the leper is allowed to remain in his own house.

#### 7. Answers to Question E:—

Segregation is carried out at the asylums and where lepers have permission to live in their own homes—but it is by no means complete; it is only now after

over 100 years that a wall of sufficient height to prevent the lepers absconding is being built round the leper premises at Hendela; at Kalmunai there is practically no protection for keeping them in.

#### 1. NAME OF INSTITUTION FOR LEPROSY.

					No. of Patients.		
Na	Name of Institution.					At beginning of 1908.	At end of 1908.
Hend <b>ela</b> Kalmunai	•••	•••	•••	•••	382 30	320 18	325 26

The Honourable The Colonial Secretary, Colombo.

I am, &c., A. Perry,

Principal Chief Medical Officer and Inspector-General of Hospitals.

#### WESTERN PROVINCE.

# List of questions respecting leprosy. Number of known cases.

	Year.		No. of New Cases recognised during the year.	Total No. of Cases known to be present in the Colony in the year.	No. of Deaths from Leprosy during the year.	Estimated Population of the Colony.
1897			75	_	29	3,100,607
1898			68	_	46	3,448,752
1899	•••		65	_	45	3,489,293
1900			78	_	39	3,612,303
1901	•••		79	_	43	3,619,165
1902	•••		59		41	3,685,267
1903	•••		98	<u> </u>	83	3,745,562
1904	•••		124	_	58	3,812,931
1905	•••		96	_	74	3,950,123
1906	•••		98		67	3,984,985
1907	•••		92	_	66	3,988,064
1908	•••		111		62	4,038,456

#### CENTRAL PROVINCE.

# Statement called for by Principal Chief Medical Officer's Circular, No. 34, of 17th April, 1909.

	Year.	Number of New Cases of Leprosy recognised during the year.	Number of Deaths.	Total number of Cases known to be present in the Province.	Estimated population.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908		 7 1 8 10 13 8 9 6 9 13 9	- - - 2 1 - 1 - 3	5 1 3 4 5 6 5 6 3 3 3	Not available  ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Aug. 2		109	8	44	

# Northern Province. Number of known cases, 12.

Year.	No. of New Cases of Leprosy recognised during the year.	Total No. of Cases known to be present in the Country/Colony in the year.	No. of Deaths from Leprosy during the year.	Estimated Population of the Country/Colony.
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907	- - - - - - 4 1 - -	- - - - - - - 4 1 - 1	- - - - - 5 - 1 2 - 8	337,416 340,052 339,579 347,043 352,938 349,759 345,670 350,533 350,677 320,354 359,137 363,276

# Southern Province. Number of known cases.

Year.			Number of New Cases of Leprosy recognised during the year.	Total Number of Cases known to be present in the Colony in the year (Southern Province).	Number of Deaths from Leprosy during the year.	Estimated Population of the Country/Colony (Southern Province).	
1897	•••	•••	21	_		510,335	
1898			11			520,317	
1899	•••		15	_	<del></del>	532,123	
1900	•••	• • •	26	<del></del>	<del></del>	540,902	
1901			22	_	_	561,315	
1902			11		_	569,944	
1903			33	_	_	579,827	
1904	•••		27		_	591,238	
1905			14	_	_	603,270	
1906			15		1	569,740	
1907			8	_	_	591,354	
1908	•••	•••	17	_	_	626,218	

# Eastern Province.

# Number of known cases, 123.

Year.		Number of new cases of Leprosy recognised during the year.	Total number of new cases known to be present in the Country/Colony in the year.	Number of deaths from Leprosy during the year.	Estimated population of the Country or Colony.	
1897 1898 1899 1900 1901 1902 1903 1904 1905 1906 1907 1908 Tots		During this period 97 new cases were recognised. I am not able to ascer- tain the number recognised each year.  22 4 123		During this period there were 20 deaths. I am not able to ascertain the number of deaths that occurred each year.	$\left\{\begin{array}{c} 135,761\\ 139.538\\ 141,159\\ 143,012\\ 146,658\\ 149,044\\ 152,218\\ 154,789\\ 153,522\\ 154,640\\ 155,216\\ 157,219\\ \end{array}\right.$	

# NORTH-WESTERN PROVINCE. Number of known cases, 5.

	Year.		No. of New Cases of Leprosy recognised during the year.	Total No. of Cases known to be present in the Country/Colony in the year.	No. of Deaths from Leprosy during the year.	Estimated Population of the Country/Colony.
1897					_	
1898	•••		<u> </u>		1	Estimated popula-
1899			2	. 2		tion in 1908:-
1900	•••	•••	_		_	
1901		•••	<del>-</del>	<del>-</del>	_	Kurune- 270,058
1902	•••		<u> </u>	<u> </u>	_	gala.
1903	•••		<del>-</del>	<u> </u>	_	Puttalam 28,492
1904			_	_	_	Chilaw 83,473
1905	•••	•••	<del>-</del>	<u> </u>	_	
1906		•••		_	_	This is the only
1907			1	1	_	information
1908			2	2	1	available.

# UVA PROVINCE. Number of known cases.

Year.	Year.  No. of cases of Leprosy recognised during the year.		No. of deaths from Leprosy during the year.	Estimated population of the Country/Colony (Uva Province).		
1897	5 7 11 3 4 6 3 9 -6 6 6 4	5 7 11 3 4 14 3 9 - 8 6 6	2 - 2 - - - - -	164,541 166,445 166,452 188,964 186,528 186,801 189,585 190,671 191,643 190,817 190,584 190,994	No particulars available for 1905.	

## SABARAGAMUWA PROVINCE.

In the whole Province the recorded cases during each year are as follows:-

Year. Total cases.		Total cases.		Total cases.  Total cases known to be present in Country.  No. of deaths f Leprosy during			
1897 L898	•••		2 2		_	_	
1899	•••		$1\tilde{3}$		_	_	
L900 L901	•••		13				
.902 !903	•••		$\frac{15}{6}$		_	_	Not available.
904	•••		11		_	_	Not available.
.905 .906	•••		8				Į į
907	•••		4		_	<u> </u>	
.908	•••		5			1	J
			89		_	2	

#### A.

An Analysis of 1,700 Cases of Leprosy treated in the Leper Asylum, Hendala.\*\*

COMPILED BY C. HEYNSBERG, L.R.C.P. & S., Edin., L.F.P. & S., Glasgow.

I have always thought that an analysis of the cases of leprosy treated in the Hendala Leper Asylum, as obtained from the registers of that institution, will prove interesting. I am aware that no particular inference could be deduced from statistics taken from the asylum register, bearing reference to the incidence of the disease as it prevails in the island. For instance, one cannot draw the particular inference that because a large number of lepers hail from a particular town, as shown from the register of the asylum, that that town should be labelled the chief leper locality of Ceylon, for it is probable that for every one leper sent to the asylum from that locality there are two or three of them in their respective homes in other localities. Then there is the difficulty of locating the actual place in which the disease was acquired.

Although the largest number come from Colombo, it is by no means certain that every one of them contracted the disease here, for the poor, especially those afflicted with sores, seek to migrate to Colombo with the view of earning a livelihood or begging about from door to door. Every effort is now being made to register details of their birthplace and the duration of residence in each of the places the patient had visited; and if there is one place more than another that is observed to supply to this asylum a large number of lepers it would, I think, be interesting to study the conditions that exist in that particular locality favourable for the spread of

that disease, conditions, chiefly peculiar to the place.

I have endeavoured to take a summary from the register of the Hendala Leper Asylum from the 1st December, 1863, to the 30th September, 1907. There have been 2,772 registered cases, but these include re-admissions of one and the same patient—that is, a patient absconds, is discharged, leave is granted, or takes home isolation permit, and either comes back or is brought back by the police, weeks or months or years after. Such a case is re-admitted in the register—but carefully excluding such re-admission for the period of nearly 44 years, I have obtained particulars of 1,700 cases which may be regarded as entirely new.

#### Locality.

It will be noticed from the map here (a map was shown at the meeting) that every province in the island has contributed to the leper asylum at Hendala its leper. The lepers from South India—217 in number—are of course not included in the map. The Western Province takes the lead with 1,019—i.e., nearly 60 per cent. of the total treated, including Southern Indian, or 70 per cent. of the island alone.

The Southern Province comes next with 268,

Central with	 57
Sabaragamuwa with	 54
Uva with	 36
Eastern Province with	 25
Northern with	 12
North-Western with	 11 and
North Central with only	 1

The Eastern Province has a small leper asylum at Batticaloa.

As I mentioned before, it will be misguiding to mark any inference from statistics of the leper asylum, for the farther away from the vigilance of the police the less chance is there of the enforcement of the Leper Ordinance, and consequently there is a less number admitted into the asylum from these places.

The blackened areas in the map indicate the localities from which the patients

came to the asylum.

It would appear at a glance that Colombo and its neighbourhood are darkened more than any other part of the island. From within the limits of the municipality of Colombo alone, out of the 1,700 cases under review 523 were admitted, or in other words nearly one-third of the total under review hailed from the city of Colombo.

<sup>\*</sup> A paper read before the Ceylon branch of the British Medical Association on the 22nd February, 1908.

But as I stated before, there is a natural tendency for the poor, and especially those afflicted with sores, to gravitate towards the metropolis, where the chances of earning a livelihood by begging are greater than in any other part of the island, and although the registers from which I have taken these notes inform us that their last place of residence was Colombo, it is by no means sure that they were born and had lived their lives in that city. It is, in any case, not pleasant to reflect that a large number of lepers are attracted to Colombo, and worse still that the tubercular variety of this disease is proportionately large among the patients from Colombo as compared with those from other parts of the island. Of the 523 admitted from Colombo there were:—

 Tubercular
 ...
 ...
 143

 Ancesthetic
 ...
 ...
 157 and

 Mixed
 ...
 ...
 223

The Korles around Colombo, it is a significant fact, have contributed a large number of patients. The most prominent being:—

Salpiti Korle

followed closely by

Siyana Korle Hewagam Alutkuru Raygam Pasdum and Hapitigam.

Moratuwa and Ratmalana alone, in Salpitikorle, have contributed 68 lepers. I have prepared a table of the localities in the different provinces that have contributed the 1,700 cases under review and have shown the number that each locality

has contributed, also the number under each variety.

It is certainly a striking fact that the localities about the sea-board are those from which the largest number of lepers have come; but it is by no means clear that this helps us to the conclusion that leprosy is produced by eating fish imperfectly cured; for a very large amount of tank-fish, caught in filthy stagnant water, is eaten in the North-Central and North-Western Provinces in the interior of Ceylon, and yet these provinces have contributed 1 and 11 respectively of the 1,700 under review.

Two years ago I was asked by the Government to report on the distress of the parangi-stricken villagers of Demala-Hatpattu and travelling through the villages of that Pattu, I noticed that the villagers ate with their rice or kurakkan a large amount of tank-fish. The tanks were at that time run dry by the drought, and most of the fish that remained were found dead in the mud at the bed of the tanks and the village boys were running away with them to their homes to cook and eat them. Acute diarrhea occurred shortly after in two of these villages, but leprosy was hardly known among them.

Jaffna, where fish is consumed in abundance, contributes 12 of the 1,700 under review—rather a poor percentage to prove that leprosy is caused by eating fish im-

perfectly cured.

Sex.

As regards sex, of these 1,700,

1,431 were males 269 females

1,700

or 1 female to every 5.32 males.

The proportionately large number of males as compared with the females is, I believe, chiefly due to the greater amount of exposure the males have to the conditions (whatever they are) that favour the propagation of the disease. It must also be borne in mind that females in their homes have better chances of escaping detection of the existence of the disease in them and their eluding the vigilance of those interested to send them to the asylum.

#### Variety.

As regards varieties—of these 1,700—there were:—

Tubercu	$\operatorname{lar}$	•••	 • • •		340
Anæsthe	etic		 		679
Mixed	• • •	• • •	 • • •	•••	681
					1,700

the tubercular thus being half that of the other varieties. The proportionately small number of the tubercular as compared with the other varieties is significant. If we are allowed to draw any inference from statistics taken from the asylum registers, I would be inclined to believe that the comparatively mild condition of the contagiousness of leprosy, as seen in Ceylon, is due in a great measure to the proportionately small number of the tubercular variety of the disease. It is an admitted fact that the quantity of "bacillus lepræ" is different in the different varieties of the disease. Scheube says that "the difference in the quantity of the bacilli in tubercular and nerve leprosy is remarkable and hitherto has remained unexplained. The tubercles and infiltrations of tubercular leprosy usually contain myriads of bacilli, while in nerve leprosy they are only found in small numbers in certain parts of the nerves or they may even be quite lacking. Perhaps in nerve leprosy the bacilli soon perish, and their toxin plays an important rôle in the development of the disorder." But, as I have just mentioned, the largest number of patients in the registers of this asylum for the last 44 years has been treated for the mixed variety of the disease, viz., no less than 681 cases out of the total of It must, however, be mentioned that the cases known as mixed 1,700 under review. are chiefly anæsthetic, with slight symptoms of the tubercular variety appearing somewhere on the body, especially on the face and ears. I may here mention that personally, so far, I have seldom met with a tubercular case without some symptoms of anæsthesia being present either preceding, succeeding, or co-existent with, tuber-cular symptoms. The anæsthetic and tubercular varieties may at the start be distinct and unique, but frequently as time goes on the two varieties blend together. The nerves are affected in both, and nodular growths in the ear and nose occur in the course of nerve-leprosy, and often under Chaulnoogra treatment the nodules of the tubercular form disappear, leaving symptoms of the nerve form only. This occurs particularly among the young leper-patients. That is, those whose ages are less than 25.

#### Propagation of the Disease.

The question that naturally occurs under this head is, how far or how much are we to believe in the propagation of leprosy by contagion. Of course one cannot help but conclude that as long as there is a specific bacillus of leprosy, the propagation of the disease from a leper to a healthy human being is by the bacillus somehow finding its way from one to the other, under the distinct condition, however, that successful contagion and propagation can only take place when the recipient is ready to receive the bacillus and have it thrive in him. Or in other words, there is a particular condition (which condition is still shrouded in mystery) on the part of the recipient which can render contagion successful, followed by the propagation of the disease.

I may, however, be permitted to state my own personal observations in the Hendala Leper Asylum. When I took charge of this institution I made a point of finding out, as best I could, all about the commensal mode of contagion of leprosy.

I was not long in noting the following:-

- 1. That the boundary wall of this asylum was infested with pauper children from the villages in its immediate vicinity, stealthily seeking and begging at each meal-time from outside for food from the patients. There is no doubt that remnants of the lepers' cooked food have been freely distributed to them, especially by the Buddhist patients. This had evidently been an established practice for a very long time.
- 2. I have also seen the latrine coolies of this asylum (Malabars) openly sitting among the lepers of their acquaintance and exchanging their curries or any other delicacies with them.
- 3. Then again there is the food taken by the attendants of this asylum and freely interchanged with the food of the patients, especially those with whom the attendants chum up. A patient, to show his gratitude of affection to his attendant,

does often (I am credibly informed) send some delicacy or other to his attendant's family who live in the immediate neighbourhood, and, by way of return courtesy, a

sympathetic attendant's family return the compliment.

4. We all know the usual exchanging of civilities among the Singhalese and Tamils of this country, by the exchanging of betel, arecanut, &c., between one another for chewing purposes. This is a matter of frequent experience in this asylum between patient and attendant, and I have seen patients covered with sores up to the time of their forces described the control of the control up to the tips of their fingers doing this act of civility to his attendant.

The attendants have, daily, carried the patients' soiled linen or have frequently carried the bed-ridden patients, or dressed twice daily or oftener the patients' sores with their bare fingers, as it is part of their daily duty to do so, and I have often seen them doing so having open wounds or sores on their bodies, even

though often warned not to do so.

These attendants go to their homes, which are in the vicinity of the asylum, immediately after dressing the sores of the lepers and in their work-a-day clothes caress their children and often feed them with their hands. They are never over-

particular of cleaning their nails.

With much persuasion and firmness we are endeavouring to put down these irregularities, but what has lasted for forty or fifty years or more cannot be suppressed in a few months. I mention this to show that in spite of this, leprosy has by no means spread in the village of Hendala and those others in its vicinity nor Then again, the attendants of this asylum and their among the latrine coolies. fathers before them for several generations have closely attended the patients. have seen them applying pressure above asinus and wiping off purulent discharges with their fingers, and they have been doing this for years, and yet not one of them has contracted leprosy.

I repeat, with all these conditions existing since the establishment of this asylum—exactly 200 years now—that there has not been known to occur a single case of leprosy among the attendants or coolies or their families or the villagers

around the asylum is a most significant fact.

# Heredity.

With regard to the question of heredity, the registers of this asylum show that of the 1,700 under review, 180 patients confessed to the fact that their ancestors, paternal or maternal, suffered before from leprosy and died of that disease, and often it was within the knowledge of the Superintendent of the asylum that it was so, for they had been inmates of this asylum either together or at different times. Of these 180 patients in whom there was supposed to be hereditary taint,

> 133 were males and 47 females.

The number under each variety and their relative sexes were:—

				Males.	Females.	Total.
Tubercular	•••		•••	 26	11	37
Anæsthetic Mixed	•••	•••	•••	 $\begin{array}{c} 47 \\ 60 \end{array}$	18 18	37 65 78

This chart (a chart was shown at the meeting) indicates particulars of three varieties of confessed hereditary lepers.

It is interesting to note the ages at which they had symptoms of leprosy dis-

playing themselves.

In tubercular variety the period from 20 to 25 years of age seems to be the prominent time on which the symptoms of leprosy displayed themselves in heredity.

> In anæsthetic between 5 and 10, In mixed between 15 and 20.

Of course, these figures are taken from statements made by the patients themselves, and there is no reason to doubt their accuracy.

With such a large number as 180, whose fathers and grandfathers before them

or with them had been treated for leprosy in this asylum, I fail to see how we can altogether discard the idea of heredity taking a part in the propagation of leprosy.

On the other hand, it is indeed difficult to distinguish the propagation of the disease by heredity from the propagation of the disease by commensal means.

It is a very common sight—in this country especially—to see a father or mother or their immediate ancestor feeding their child, and should such an ancestor be a leper how may we distinguish the propagation of the disease by commensal communication and the propagation of the disease by heredity?

To favour the idea of propagation by heredity there is a very unique case on record, in which the disease is said to have manifested itself in an infant three months after birth. His father was a leper in the asylum, and is responsible for the statement that this infant had symptoms of leprosy three months after birth. The following is an extract from the Register:—"No. 267, Kirimudianse 11 years of age admitted 21st Nov., 1882—Male—Singhalese—Anæsthetic Leper of Mahawela, Ratnapura District—His father is a Leper in the asylum—(Case No. 252)—Mother died in child birth—He is an only child—Vaccinated—His father states that some pale discoloured spots were observed on the boy's body on the back three months after birth, since which other fresh spots appeared and spread, forming patches on the back and buttocks. These spots and patches are stated to have lost sensation about a year ago. Small bullæ appeared in the right heel and ankle and burst, resulting in ulcers which healed after a month. Two months since both his legs and feet got benumbed, followed soon afterwards by numbness of his forearms and hands."

Five out of the 180 of the supposed hereditary lepers had their first symptoms of leprosy manifested when they had passed their 55th year.

### Death among Lepers during last 10 years.

Of those who died during the 10 years between 1897 and 1906, the particulars are as follows. There was a total of 525 deaths during that period.

Of these 525 deaths,

There were Tubercular	 	 	93
Anæsthetic	 	 	169 and
Mixed	 	 	263

The largest number of tubercular patients seems to have died at the ages of 10 or under and the anæsthetic and mixed at the ages of from 10 to 20, so that the disease seems to be more active when acquired in early life than in later periods.

# Age.

Then, as regards the ages in which the disease occurred, it is interesting to note that it is somewhat different in the tubercular as compared with the other varieties of the disease. In the tubercular variety, the largest number seems to have occurred between the ages of 20 to 25 years. In the anæsthetic and mixed, between the ages of 25 and 30. But when it is considered that the tubercular variety is the least by far of the three varieties, it would not be well to place any importance on this slight difference. On the whole, the ages between 25 and 30 may be safely regarded as the probable period on which the disease manifests itself, at any rate in Ceylon.

### Occupation.

It is interesting to note the various occupations of the 1,700 patients under review. Of course, there is a large number—323—under the head of "No occupation" for the simple reason that children under age and women who did household duties could not have been entered as any with an occupation. Of those with an occupation, it is interesting to note that the "Cultivator" takes the pre-eminence. No less than 374 of the 1,700 were of that occupation.

Now, the cultivator is a term, I take it, applied in the registers of this asylum chiefly to cereal cultivation. It must be borne in mind, however, that a very large class of the Singhalese belong to this particular occupation. Otherwise it may be worth while to try to investigate and find out whether there is anything in this mode of occupation that provides an exciting cause to the propagation and maintenance of this disease.

# The other occupations are:—

Coolies (ordinary	labourers)	228	Compositors	2	
Domestic servants	s (cook, &c.)	99	Kanganies		2
Traders		99	$\operatorname{Toddy-drawers} \qquad \dots$		2
Carters		81	Road overseers	4	
Carpenters		69	Hawkers (petty traders)	6	
Estates coolies		56	Storekeepers	2	
Fishermen		54	Firemen		
Dhobies		36	Engine-drivers	1 2	2
Boatmen		16	Schoolmasters	2	
Masons	,	16	Vedarales (native doctor	s) 3	
Coopers		14	Bookbinders	· 2	
Tailors		13	Plumbago miners	9	
Blacksmiths	•••	16	Hospital attendants	5	
Coffee sorters	•••	14	Lace makers	2	
Bakers	•••	11	District Court translator		
Fitters	•••	11	Ordinary translator	1	
Peons	· · · · · · · · · · · · · · · · · · ·	13	Plumbago sorter	1	
Horsekeepers		9	Do. dealer	1	
Bread vendors		8	Typist	1	_
Clerks	•••	7	Sanitary inspector	1	
Weavers		6	Dispenser	1	
Basket-women fra	aitsellers	8	Lapidary	1	
Painters		7	Barber	1	_
Estate conductors		5	Cocoanut-climber	1	
Tavern keepers	• • • • • • • • • • • • • • • • • • • •	4	Jail warder	1	-
Tally clerks		3	Broker	··· 1	
Tom-tom beaters		4	Comb maker	1	
Police constables		6	Hospital assistant	1	
Tinkers		2	Lamp-lighter	1	
Butchers		5	Monthly nurse	1	
Buddhist priests		5	Surveyor	1	
Shoemakers	'	4	Shepherd	1	
Sawyers		3	Wesleyan minister	1	
Sewing women		5	Musician	1	
Cart contractors		3	Dairyman	1	
Cinnamon peelers		3	Brickmaker	1	
Planters	•••	2	Tea maker	1	

#### Nationalities.

As regards race or nationality the following are the details of the 1,700 leper patients:—

Singhalese		•••		•••	1,302
Indian Tamils			<i>'</i>		217
Moors					83
Ceylon Tamils		• • •			37
Malays	١				11
Eurasians			• • •		36
Burghers	• • •	• • •	• • •	• • •	10
Europeans	• • •		`•••	• • •	1
Creoles		• • •	• • •		1
Afghans	• • •	• • •	• • •	• • •	1
Bengalis			• • •	• • •	1

# Religions.

As regards religion, no record, unfortunately, has been kept, but of the 326 now under treatment.

		Males.	Females.	Total.
Buddhists number Roman Catholics Church of England Mohammedans Sivites	 	171 42 6 12 14	51 13 5 3 9	222 55 11 15 23
		245	81	326

#### Venereals.

Gonorrhæa.—Of the 1,700 under review, 169 confessed to have suffered previously from Gonorrhæa; they were all males and belonged to the following varieties:—

Tubercular		 	 • • •	31
Anæsthetic		 	 	69
Mixed	1	 	 	69

Syphilis.—Of the 1,700 now in course of analysis, 110 confessed to a previous history of primary syphilis. They were all males, and of the following varieties:—

Tubercular	 		 	24
Anæsthetic	 	• • •	 	50
Mixed	 	·	 	36

# Lepra Ophthalmica.

The eye is affected frequently in leprosy, in tubercular cases especially; 89 of the 326 now under treatment suffer from eye affection. Infiltration takes place under the conjunctive and a pterygial growth is noticed which invades the cornea in time and gradually obstructs vision. At present, of the 89 affected, 70 suffer from this infiltration and obstruction of vision.

Grossman has described a condition at the epi-scleral conjunctive—a white and ivory-like growth which infiltrates into the cornea occluding vision.

Dr. W. H. de Silva, who made a careful study of the eye in leprosy has read a paper before the last annual meeting of the British Medical Association. He is qualified to speak with authority on this subject, and as he is present at this meeting to-day, I am looking forward to hear him.

Paralysis of the lower eyelid always produces ectropion, and lagopthalmos occurs, producing very distressing conditions of the eye, terminating in gradual destruction of the eyeball. Of the 89 affected in the eye, 19 suffer from lagopthalmos.

Cataract.—There is sometimes cataract noticed over a diabetic condition and general debility. There are five such cases now of the 89 in whom the eye is affected.

## Bone Affected.

In anæsthetics, when the tarsal or carpal, metatarsal or metacarpal, or phalangeal bones are affected, an osteomyelitic condition quickly progresses, commencing from the middle of each bone, the patient getting rapidly exhausted, a decline sets in and tubercle of lungs follows, giving the patient a prolonged illness, and the tenacity with which he clings to life is remarkable. In the Hendala Leper Asylum there are no less than 87 per cent. in whom the immediate cause of death is tubercle of lung. There are also other intercurrent diseases that occur among lepers, viz., diarrhæa, due perhaps to an albumenoid degeneration of the alimentary tract,

nephritis, said to occur, according to Scheube, from an amyloid condition of the kidneys; dysentery and pneumonia, too, prove very troublesome in a leper patient and often end fatally.

# Early Manifestations of Anæsthetic Leprosy.

I find that of the 679 anæsthetics the disease manifested itself in 423 by maculæ that appeared in the face and extremities at first, spreading rapidly and invading other parts of the body. In 168, macular spots appeared at first on the chest and back and buttocks. In 88 cases the maculæ appeared generally all over the body. Those on whom these macular spots appear do not at first seem to bother about them at all, declaring that the appearance is only an ashy condition of the skin (aluhang), and it is only when anæsthesia sets in that they generally look upon it as serious and seek advice.

#### Treatment.

With regard to the treatment at this asylum, nothing seems to have done as much good as chaulmoogra oil applied externally and taken internally. Gurgun oil also is applied externally frequently. The chief treatments insisted on are good, healthy, and pure hygienic conditions, plenty of baths, and that daily, and an ample amount of nourishing food.

I believe that the reason why the disease breaks out afresh in a patient who is discharged to all appearances well, is because on his return to his home, he does not get all the necessary hygienic surroundings, nor does he get sufficient to eat and he does not get his regular baths. His surroundings are very depressing. His own people often shun him. He gets into a very low depressed state and the disease reappears.

With regard to food, I may be allowed to quote the words of Dr. Chivers, as published in the "Medical Times and Gazette," of 27th September, 1884:—

"A half-starved voracious dyspeptic, such as the leper generally is when we begin to treat him, requires the best food, and, as his digestion improves, plenty of it."

In conclusion, I must add that I am indebted chiefly to Dr. Meier, my predecessor in office, for the information contained in the Registers from which these notes were taken.

I must also thank Dr. Chalmers and this Association for getting these charts and maps enlarged on cloth from similar ones, on paper, of my own.

#### HONG KONG.

HONOURABLE COLONIAL SECRETARY,

When the New Territory was taken over in 1898, a small settlement of lepers was found living on an island in the midst of a swamp near Au Tau.

A small building, more or less isolated, was erected by Government on dry land near by, and the sufferers, 22 in number, were housed there.

They are supplied with food and are regularly visited by a Government Medical Officer.

The numbers have gradually diminished by death, so that at the beginning of this year there were only 13 inmates.

With this exception, there are no resident lepers in this Colony; any cases that occur are deported by the police to Canton.

The disease is not a notifiable one here.

J. M. Atkinson, Principal Chief Medical Officer.

19th April, 1909.

## MAURITIUS.

Statement showing the number of inmates at St. Lazare Leper Asylum at the present time and the distribution of the cases according to sex, age, race, soil occupation, and family connection.

# Total number of inmates, 140.

			Sex.				
7. T. 1							110
Males	• • •	• • •	•••	• • •	• • •	• • •	112
Females	• • •	• • •	• • •	•••	• • •	• • •	28
							$14\overline{0}$
			D				
			Race.				
African creo	les or r	nixed i	blood				66
Indians							64
Chinese		•••	•••	•••	•••	•••	10
Chinose	•••	•••	•••	•••	• • •	• • •	10
							140
							140
			Soil.				
D:	1						115
Districts wit		coast	line	• • •	• • •	• • •	115
Inland Distr				• • • •		• • •	13
Oil Islands (	Depend	$_{ m lencies}$	of Ma	uritius	)		5
China			• • •				7
							$14\overline{0}$
			. •				
		Occ	cupation	n.			
Labourers							<b>6</b> 8
Artizans	•••	•••	•••	•••	•••	•••	41
Clerks					• • •	•••	4
	• • •	• • •	• • •	1	•••	•••	$\frac{1}{22}$
Unemployed	• • •	• • •	• • •	• • •	• • •	• • •	
Fishermen	• • •	• • •	• • •	•••	• • •		5
•							140
			Age.				
			21 g o.				
0-5	• • •		• • •		• • •		. 2
10-15	• • •						3
16-20							5
21-30							28
31-40							45
41 50	•••	•••	•••	•••	•••	•••	27
F1 00	• • •	• • •	•••	• • •	•••	• • •	16
	• • •	• • •	• • •	•••	• • •		11
61-70	• • •	•••	•••	• • •	• • •	1	
71-80	• • •	• • •	• • •	• • •	• • •	•••	3
							140
							140

# Family Connections.

Nos. 28 and 29 of the Asylum roll, uncle, 33 years; and nephew, 24 years.

Nos. 27 and 30 of the Asylum roll, uncle, 71 years; and nephew, 35 years.

Nos. 22 and 5 of the Asylum roll, father, 40 years; and daughter, 14 years

Nos. 29, 26, 27 of the Asylum roll, mother, 48 years; daughter, 25 years; grandson, 3 years.

## SEYCHELLES.

The Governor to the Secretary of State.

(Extract.)

Government House, Seychelles, 25th May, 1909.

In my judgment, the disease of leprosy is less prevalent than I have been led to anticipate. The disease is known to exist in certain families, but I am inclined to attribute its occurrence rather to the evils of too frequent intermarriage among the old families of French colonists than to any dietary cause. The disease is not markedly on the increase.

## Extract from Enclosure.

This Colony is composed of small islands and the population lives largely on fish and rice. The whole Colony may be styled "littoral."

## STRAITS SETTLEMENTS.

Cases of leprosy are met with throughout the Settlements, on the littoral and inland, showing apparently no marked predilection for either. Neither race, soil, food, nor other condition has been noted as bearing any relation to the distribution of cases. The majority of cases occur amongst Chinese, as is to be expected, considering their great preponderance of numbers over other races in the Settle-The Chinese eat sparingly of salt, a suggested cause of the disease. The non-segregation of Chinese lepers in the earlier stages of the disease by their friends and relations is possibly a factor in the spread of the disease, though I have known a Chinese householder in the twentieth year of the disease with a healthy wife and six children where no precautions had ever been taken to prevent the affection spreading in the family.

#### FIJI.

With regard to replies to the questions in the circular, it would be impossible to supply the information asked for in "A" in the short time, and then it would probably be very far from accurate and would depend for the most part on native reports. Statistics of the lepers in the whole country are now being collected; and from these, which are being got ready with a view to the new station at Beqa, the numbers so far are under 300 of all races, but many of these cases have not been verified by European Medical Officers because of the scattered nature of the towns, so that the estimate is only a rough one at present.

Statistical returns of the kind asked for in "A" will only be possible when

the new station is in working order and the new Ordinance proclaimed. Cases are found all over the group both inland and in coastal districts.

The cases are found in all races in Fiji, i.e., Europeans—a few—, Indians, Polynesians, and native Fijians.

#### TONGA.

## A.—Number of known cases.

Prior to my arrival in Tonga in the end of 1906 no record of any medical cases had been kept.

I have seen very few cases of leprosy in the Tongan Group of islands, and very few are known to exist. There are only six cases on record:—

2 in Tongatabu,

3 in Haapai,

1 in Vavau.

No fresh cases have come under the notice of the authorities for the last two years

The population of the three groups of islands above mentioned, which are included under Tonga, is supposed to be about 20,000.

# B.—Distribution of cases.

Owing to all the islands in the Tongan Group being comparatively small, the cases would be classed as occurring on the littoral.

# C.—Notification of cases.

The "Bules" or heads of the towns are instructed to notify any suspicious cases in their districts to the Head of the Police, who in turn communicates with one of the Government Medical Officers, of whom there are three, who advises as to whether or no the case is one of leprosy.

There are so few cases here and these have been known for some time that

it is difficult to say when they first came under the notice of the authorities.

They are all of the nerve or anæsthetic type, and they were probably not recognised as cases of leprosy until the maculæ became very marked and the colour changes in the skin very pronounced.

## D.—Administrative control.

The natives have such a dread for this disease, which they call kilia, that they readily help to render the isolation as complete as possible under the circum-

On the Government Medical Officer deciding as aforesaid that a case is one of leprosy, it lies with the police authorities to see that arrangements are made to isolate the person afflicted with the disease.

They act under a clause of the law of Tonga, which reads as follows:-

Should any person be infected with leprosy, the near relatives or such person shall build a house on their plantation land not less than two hundred yards from any road and one mile from any village, and shall remove such leper thither and there support him, and the leper shall not approach any public road or village, and any near relative of a leper who shall infringe any of these provisions shall, on conviction, be liable to a fine not exceeding fifty dollars, to be recovered by distress. Provided that it shall be lawful for the Minister of Police, with the consent of the Cabinet, to issue a written order for the removal of any leper to an island when the Government shall have set apart an island for the reception of lepers."

C. E. MAGUIRE, M.D.,

Senior Medical Officer.

Nukualofa Hospital, Tonga, 24th May, 1909.

## ST. HELENA.

No record kept until 1905, though a male, aged 23, is registered as having died of leprosy in 1901. In 1905 there were three cases of leprosy in the Colony, the civil population numbering 3,781. In that year one of the lepers, an old man, died from accidental burns. One fresh case of leprosy occurred in 1907 (a small boy). This made three cases in all in a population of 3,746. A leper (male, aged 58, grandfather of the boy referred to above) died in 1908. There are now only two cases in the Colony in a population of 3,558.

All cases recorded in Jamestown near the sea level. It is supposed that all

the cases are instances of contagion from cases that had previously existed.

For the first time in the Colony's history steps are now being taken to segregate a case of leprosy—that of a child aged seven years who contracted the disease from his grandfather in 1907. The grandfather died in 1908.

The only other suspected case existing in the Island, an old man, is considered by the Colonial Surgeon to be sufficiently isolated at his own home. The surroundings are good and measures of disinfection are used as to feeding, clothing, &c.

#### ILLUSTRATIVE LEGISLATION.

#### BRITISH GUIANA.

ORDINANCE No. 15 of 1905.

An Ordinance to make provisions as to Lepers.

A.D. 1905.

[13th May, 1905.]

Be it enacted by the Governor of British Guiana, with the advice and consent of the Court of Policy thereof, as follows:-

Short title.

This Ordinance may be cited as the Lepers Ordinance, 1905.

2. In this Ordinance,—

Interpretation.

No. 5 of 1886.

"Leper" means any person suffering from any variety of leprosy.
"Registered Medical Practitioner" means a medical practitioner registered under the Medical Ordinance, 1886.

Leper Asylums.

Governor may declare Leper Asylums.

3. The Governor, by Proclamation to be published in the "Gazette," may declare any buildings and the land attached thereto to be a Leper Asylum, and thereupon such buildings and land shall be a Leper Asylum under this Ordinance.

Leper Asylum at Mahaica. 4. The buildings and land near Mahaica now actually used and occupied as a Leper Asylum, together with such other buildings and land adjacent thereto as may hereafter be erected or acquired for the same purpose, shall be deemed to be and the same are hereby declared to be a Leper Asylum under this Ordinance.

5.—(1) The Governor shall, from time to time in his discretion, appoint a registered Medical Practitioner to perform the duties of Medical Superintendent for any Leper Asylum, and such staff as may be necessary.

Governor may appoint Officers.

Control of Asylum.

and such staff as may be necessary.

(2.) The Surgeon-General, subject to the direction of the Governor, shall have the control and management of every Leper Asylum.

## Admission to Asylum.

Admission of Leper to Asylum.

6.—(1.) Whenever it shall be made to appear to a Magistrate that any person within the limits of his jurisdiction is probably a leper, it shall be lawful for such Magistrate upon the application of any person legally bound to maintain the supposed leper, to hold an enquiry into the case, and if such Magistrate is satisfied that the supposed leper is a leper and that he has become or is likely to become a burden upon the person legally bound to maintain him, it shall be lawful for such Magistrate by warrant under his hand to order the detention of such leper in a Leper Asylum until he is discharged by order of the Governor and the person legally bound to maintain such leper shall pay every month to the Government during the detention of such leper such sum for his maintenance as the Magistrate, having regard to all the circumstances of the case, shall order.

(2.) Any Magistrate, on its being certified to him by any Registered Medical Practitioner that any person within his jurisdiction is a leper, and on its being further certified by such registered Medical Practitioner or by any officer of the Poor Law Commissioners, or officer in charge of any public institution, or Justice of the Peace, that such person is a fit subject for gratuitous relief, may, on application by or on behalf of such person, make an order for such person to be

admitted into a Leper Asylum and to be maintained there, free of charge, until discharged by order of the Governor, as hereinafter provided. (5 of 1870, s. 6, amended.)

7.—(1.) It shall be lawful for any Magistrate, on information upon oath of any credible witness, that any leper has been wandering about begging or collecting alms, or seeking precarious support, or exposing his leprosy in any public road, street, or place, to summon such leper to appear before him, or if he thinks it necessary, such Magistrate shall issue a warrant, under his hand, directed to any constable or officer of Police, authorizing or directing such constable or officer of Police to cause any such leper to be brought before him at a time such constable or officer of Police to cause any such leper to be brought before him at a time and place to be specified in such summons or warrant.

(2.) Any officer of Police may arrest without warrant any leper whom he finds wandering

(2.) Any officer of Police may arrest without warrant any leper whom he finds wandering about begging or collecting alms, or seeking precarious support, or exposing his leprosy in any public road, street, or place, and shall as soon as possible thereafter bring him before a magistrate, to be dealt with as hereinafter provided.

(3.) If, on the hearing of the case, it is proved to the satisfaction of such Magistrate that such supposed leper is a leper, and it is made further to appear, upon the oath of some credible witness, that such leper has been seen wandering abroad begging or collecting alms, or seeking precarious support, or exposing his leprosy on any public road, street, or place, then it shall and may be lawful for such Magistrate, unless security is given as hereinafter provided, to make an order for the removal and conveyance of such leper to a Leper Asylum, and any constable or officer of Police, thereto directed by such Magistrate, shall remove and convey such leper to a Leper Asylum, there to be detained until discharged by order of the Governor, as hereinafter provided.

(4.) If, on the hearing of the case, the leper or any one on his behalf, gives security to the Crown Solicitor, by a bond to his satisfaction to the amount of ninety-six dollars, that

the Crown Solicitor, by a bond to his satisfaction to the amount of ninety-six dollars, that such person shall be properly isolated and maintained and treated in private, and shall not be suffered to be at large, the Magistrate may abstain from making an order of removal. The amount so secured shall be recoverable by parate execution. (5 of 1870, s. 7 amended.)

(5.) If it be proved to the satisfaction of a Magistrate that any leper as to whom security has been given under section 7 (4) hereof is not maintained in a state of isolation from the

dealing with leper wandering about begging, etc.

general public, it shall be lawful for such Magistrate, by warrant under his hand, to order the detention of such leper in a Leper Asylum until he is discharged by order of the Governor.

8. The Surgeon-General may, on the application of any leper able to support himself, admit such leper to any Leper Asylum; and such admission shall be on such terms and conditions, as to payment for maintenance and in other respects, as to the Governor may suppose meet. Such leper shall remain in the Leper Asylum until discharged by order of the self. Governor as hereinafter provided. (5 of 1870, s. 8 amended.)

Asylum of support him-

Admission to

9. When any leper is sentenced to imprisonment for any offence, or for the non-payment of any money or penalty, the Judge or Magistrate inflicting the imprisonment shall order that such leper shall be committed to a Leper Asylum to undergo such imprisonment and to be detained thereafter until discharged by order of the Governor.

10.—(1.) The Governor may by Proclamation to be published in the "Gazette" set apart Power to any portions of any Leper Asylum as places in which lepers sentenced to imprisonment or of Asylum for who have been certified as suffering from lunacy shall respectively be detained, and any such lepers may lawfully be detained therein, any law to the contrary notwithstanding.

Leper sentenced to imprisonment to be committed to Asylum.

(2.) When the term of imprisonment expires, or the lunatic recovers his sanity, then, unless the Medical Superintendent certifies in writing that any such person may be discharged without detriment to himself or others, such person shall be retained in the Asylum as an

ordinary leper.

(3.) The Governor-in-Council may make rules as to the management of such portions so set apart and as to the treatment and discipline of the persons detained therein.

(4.) The portion set apart for lepers sentenced to imprisonment shall be deemed and the level of the Surgeon-General. taken to be a prison and shall be under the sole control of the Surgeon-General.

11. The inmates of any Leper Asylum may at any time, by order of the Governor, be removed therefrom to any other Leper Asylum. (5 of 1870, s. 3).

Power to order removal of leper in one Asylum to another.

12. Every person received into a Leper Asylum under any warrant or order issued under the provisions of this Ordinance may be detained therein until he be removed or discharged, and in case of escape may by virtue of such warrant or order be captured by any officer or servant of such Asylum, or any police constable or other person, and may be conveyed to and received into and detained in such Asylum.

Capture of lepers escap-Asylum.

## Discharge from Asylum.

13. The Governor may, in his absolute discretion, order the discharge of any inmate Governor of a Leper Asylum, not being a prisoner under sentence of imprisonment, upon security being given by some person on behalf of such inmate, to the Crown Solicitor by bond in the sum of ninety-six dollars that such inmate shall be properly isolated, maintained, and treated in private, and shall not be suffered to be at large. The amount so secured shall be recoverable private, and shall not be suffered to be at large. The amount so secured shall be recoverable by parate execution. (5 of 1870, s. 9, amended.)

14. Whenever it appears to the Medical Superintendent of a Leper Asylum that any Discharge

Asylum.

inmate thereof is fit to be discharged therefrom, such Medical Superintendent shall certify the same to the Governor; and thereupon it shall and may be lawful for the Governor to direct that such person shall be discharged. (5 of 1870, s. 14.)

certificate of Medical Superintendent.

## Prohibition of Certain Trades to Lepers.

15. No leper shall carry on any of the trades or callings specified in the Schedule to this Ordinance, or any other trade or calling which the Governor-in-Council may from time to time by Order to be published in the "Gazette," prohibit lepers from carrying on.

16.—(1.) Any leper who shall carry on any trade or calling as aforesaid, and any person who shall knowingly employ a leper in any such trade or calling, shall be liable to a fine not exceeding fifty dollars, and any leper so convicted may be committed to a Leper Asylum, to be detained there till discharged by order of the Governor.

(2.) Any person knowing himself to be a leper who shall enter any public vehicle or lodge in any hotel, boarding house or lodging house, or enter any shop where food or drink is sold to be consumed on the premises, or bathe in any public bath, and the proprietor or person in charge of any such public vehicle, hotel, boarding house, lodging house, shop, or bath, who shall knowingly allow any leper to enter the same shall be liable, on summary conviction, to a fine not exceeding fifty dollars, and any leper so convicted may be committed to a Leper Asylum to be detained there till discharged by order of the Governor.

17.—(1.) If any leper sells any article of food or drink which has been prepared or Sale of food,

17.—(1.) If any leper sells any article of food or drink which has been prepared or Sale of food, handled by him or with which he has come in contact, he shall be liable, on summary conviction, to a fine not exceeding fifty dollars, and may be committed to a Leper Asylum to be detained there until discharged by order of the Governor.

(2.) If any person knowingly sells any article of food or drink which has been prepared or handled by a leper or with which a leper has come in contact, he shall be liable, on summary conviction, to a fine not exceeding fifty dollars or to imprisonment with or without hard labour for any period not exceeding one month, or to both.

## Landing of Lepers Prohibited.

18. No leper, who is not a native of the Colony or lawfully domiciled therein, shall Landing of land at any of the ports of the Colony from any place not within the Colony, and the master or other person in charge of any vessel who suffers or omits to prevent the landing from hibited. such vessel at any such port of any person whom he knows or has reasonable grounds to suppose to be a leper shall be liable, on summary conviction, to a fine not exceeding five hundred dollars. hundred dollars.

Harbour Master may detain leper on vessel.

19.—(1.) If the Harbour Master or other officer discharging the duties of a Harbour Master within any port in the Colony, on boarding any ship or vessel which shall come into the Colony, shall see reason to suspect that any person on board of such ship or vessel is afflicted with the disease of leprosy, but such person shall deny that he is so afflicted, it shall be lawful for such Harbour Master or other officer by writing under his hand directed to the master or other person in charge of such ship or vessel to make order that the person so suspected to be so afflicted shall be detained on board of such ship or vessel until he shall be examined by the Health Officer of the port, and such other Registered Medical Practitioner or Practitioners, if any, as the Governor shall see fit to appoint, and the master or other person in charge of such ship or vessel shall cause such person to be detained on board of such ship or vessel until such examination; and if any such person, in respect of whom any such order of detention shall be made, shall land in the Colony without the order of the Harbour Master or the permission of the Governor being first granted, the master or other person in charge

of such vessel shall forfeit and pay the sum of one thousand dollars.

(2.) Such Harbour Master or other officer immediately on making any such order for the detention of any person as aforesaid, shall notify the same and the time of making such order to the Governor and the Health Officer of the Port; and such Health Officer together with such Registered Medical Practitioner or Practitioners, if any, as shall be appointed by the Governor for that purpose, shall within fifteen hours at farthest from the time of the making of such order, visit such ship or vessel and examine such person, and shall certify in writing to the Governor whether such person is afflicted with leprosy or not; and if it shall appear by such certificate that such person is not afflicted with leprosy, the Harbour Master shall forthwith make order permitting the landing of such person; but if it shall appear by such certificate that such person is afflicted with leprosy it shall not be lawful appear by such certificate that such person is afflicted with leprosy, it shall not be lawful for such person to land in the Colony without the permission of the Governor, to be granted on its being made to appear to him that such person is a native or domiciled inhabitant of

the Colony

Provided that it shall be lawful for the Governor to grant permission for the landing in the Colony of any person afflicted with leprosy and not being a native of or domiciled in the Colony on being satisfied that two sufficient persons being householders within the Colony have entered into a bond to His Majesty in the penal sum of five hundred dollars conditioned that such person shall not wander about begging or collecting alms or exposing himself in

any public road, street, or place in the Colony nor do any act whereby such person may become chargcable upon the public funds of the Colony.

20. Every leper unlawfully landing in breach of the prohibition in the last section contained may be committed to a Leper Asylum by a warrant under the hand of the Governor and may be detained therein for such period as many be directed by great respectively.

and may be detained therein for such period as may be directed by such warrant.

21. Every leper unlawfully landing as aforesaid may be brought before a Magistrate who may examine such leper and any witness on oath touching the place from which he was brought into the Colony, and may cause such leper to be removed to the place from which he was brought in such manner as the Governor may direct; and the reasonable cost of such removal shall be borne and paid by the master or other person in charge of the vessel by which such leper was brought to the Colony, by whose act or default such leper was permitted to land, and may be sued for and recovered as money due from him to His Majesty.

22. The provisions of the last preceding four sections shall not apply in the case of lepers arriving in the Colony in any ship exclusively employed in carrying Asiatic immigrants to the Colony, but the Governor may by warrant under his hand commit any leper arriving in any such ship to a Leper Asylum, there to be detained for such period as may be directed

by such warrant.

Management and Discipline of Asylum.

Governorin-Council may make Rules.

Lepers landing may be sent to

Asylum.

Lepers un-

landed may be returned to the place whence they came.

Exception in favour of Coolie ships.

- 23. The Governor may make Rules with respect to any or all of the following matters:
  - (1.) The forms of certificates, warrants, bonds and orders to be used under this Ordinance;
  - (2.) The management, inspection, discipline, and control of Lepcr Asylums;
  - (3.) The visiting of lepers in Lepcr Asylums by their relations and friends; (4.) The appointment and dutics of officers and servants of Leper Asylums;
  - (5.) For the appointment of Official Visitors and for the periodical visiting of Leper Asylums by them; and (6.) Generally for the carrying into effect the provisions of this Ordinance.

Offence by inmates of Asylum.

- If the inmate of a Leper Asylum is guilty of the violation of any Rule made under the authority of the last preceding section for the management, discipline, and control of such Asylum, the Medical Superintendent, after due enquiry upon oath, may order such inmate to undergo any one of the following punishments:—
  - (1.) Exclusion from seeing friends for not longer than three months;
  - (2.) Deprivation of tobacco for not longer than fourteen days;

  - (3.) Reduction of rations for not longer than seven days;
    (4.) Solitary confinement for not longer than three days, and to receive only bread and water or such dict as the Medical Superintendent shall order.

More serious offences by inmates of Asylum.

- If an inmate of a Leper Asylum escapes from it or is guilty of repeated violations of any Rules made as aforesaid, which, in the opinion of the Medical Superintendent, cannot adequately be punished under the provisions of the last preceding section, the Surgeon-General, after due enquiry upon oath, may order such inmate to undergo any one or more of the following punishments:-
  - (1.) Exclusion from seeing friends for not longer than six months;
    (2.) Deprivation of tobacco for not longer than one month;

(3.) Reduction of rations for not longer than fourteen days;

(4.) Solitary confinement for not longer than seven days, and to receive only bread and water or such diet as the Surgeon-General shall order;
(5.) Imprisonment with or without hard labour for any term not exceeding one month.

Any inmate of a Leper Asylum ordered to undergo solitary confinement under the Provision 28 provisions of the last two preceding sections, shall have one hour in the open air in the to solitary morning and in the evening in charge of an attendant and apart from the other inmates.

confinement.

#### Miscellaneous Provisions.

27.—(1.) Any person not having official business at a Leper Asylum who, without permission of the Medical Superintendent thereof, goes within the limits thereof, shall be guilty person trespass, and, being convicted thereof, shall be liable to a penalty not exceeding twenty-passing on Asylum. four dollars.

- (2.) Any person who, without the permission in writing of the Medical Superintendent, purchases or receives from any inmate of a Leper Asylum any food, elothing, or other article, shall, on conviction thereof, be liable to a penalty not exceeding twenty-four dollars.
- (3.) A complaint for an offence under this section may be made by the Medical Super-intendent, or any officer of any Leper Asylum to which such complaint may relate, or any Inspector or Sergeant of Police. (5 of 1870, s. 13, amended.)
- 28. Any person who shall aid or abet any inmate of a Leper Asylum in escaping or attempting to escape from such Asylum before such inmate has been lawfully discharged therefrom, shall, on conviction thereof, be liable to imprisonment with or without hard labour for any term not exceeding three months, or to a penalty not exceeding fifty dollars.

from Asylum.

29.—(1.) No supposed leper shall be convicted of an offence under this Ordinance or Evidence removed from the Colony under the provisions of this Ordinance, and no person shall be convieted of any offence with respect to the landing, and no costs shall be recovered with respect to the removal of any supposed leper, except on the evidence or certificate of two registered medical practitioners that such supposed leper is a leper.

(2.) The certificate in writing of a registered medical practitioner shall be admissible as evidence under this section, unless the Court or Magistrate shall otherwise direct.

Any person detained as a leper in a Leper Asylum may, by the special permission Erection of of the Governor, erect or cause to be erected for himself a dwelling house at his own proper expense within the limits of the Leper Asylum in which he is detained, subject to such inmate. conditions as to plan, site, drainage, and otherwise as to the Governor shall seem fit.

- Every person residing in any house used for human habitation who knows or has good reasons to suspect that any inmate therein is a leper, and every person who knows or reasonably suspects that any person employed by him is a leper, shall give notice thereof to the nearest Magistrate, Justice of the Peace, or Government Medical Officer, who shall thereupon report the same to the Surgeon-General.
- 32. Every person wilfully neglecting to give such information as aforesaid, and every Neglect to Magistrate, Justice of the Peace, or Government Medical Officer neglecting to report the same give information, &c. as aforesaid, shall be guilty of an offence, and shall be liable on conviction to a fine not exceeding twenty-four dollars.

mation, &c.

33. On the receipt of such report as aforesaid the Surgeon-General shall forthwith forward Procedure such report to the Government Secretary for the information of the Governor, and such inspection and examination of the alleged leper shall be held and such report made thereon as the Governor shall order.

when information given.

34. After such inspection, examination, and report as aforesaid, it shall be lawful for Removal of the Governor, if he shall think fit, to order the leper or alleged leper to be removed to or Leper to detained in a Leper Asylum:

Provided always that no person shall be removed to or detained in a Leper Asylum unless a certificate shall have been given by two registered medical practitioners that such person is actually suffering from the disease of leprosy.

35.—(1.) No such order for removal or detention as in the last preceding section mentioned shall be made if the leper or alleged leper shall, in the opinion of the Governor, be able to provide for himself, at his own place of abode, effective isolation, but in every such ease it shall be lawful for the Governor to prescribe rules for observance by such leper or alleged lever in order to governor such indiction. alleged leper in order to seeure such isolation.
(2.) In the event of the disregard or breach of any such rules the Governor may order Legal proce-

Isolation in lieu of removal to Asylum.

such leper or alleged leper to be removed to and detained in a Leper Asylum.

dure.

- 36. All fines and penalties imposed by or under this Ordinance and all offences thereunder shall be recoverable and cognizable under the Summary Jurisdiction Ordinances.
- See Ordinances Vo. 12 of 1893 and No. 13 of 1893. Protection of
- All persons acting under the provisions of this Ordinance shall be entitled to the protection of the Justices Protection Ordinance, 1850. (5 of 1870, s. 15.)
- personsacting under Ordinance No. 2 of
- 38. The Leper Asylum Ordinance, 1870, is hereby repealed; Provided that this repeal shall not affect the validity of the Rules made under the authority of the said Ordinance on the eighteenth day of July, 1895, and the said Rules shall continue in operation notwithstanding such repeal, and shall be deemed to be Rules made under the authority of Section 23

of this Ordinance, and provided also that all persons lawfully detained in any Leper Asylum at the time of the passing of this Ordinance shall be deemed to be detained therein under the provisions of this Ordinance. 39. This Ordinance shall come into operation on the 1st day of July, 1905.

Commence-

ment.

Section 15.

## THE SCHEDULE.

Trades or Callings Prohibited to Lepers.

Baker. Butcher.

Cook, or any trade or calling in which the person employed handles or comes in contact with articles of food or drink, drugs, medicines, or tobacco in any form.

Fishmonger. Washer. Bootmaker.

Tailor, or any trade or calling in which the person employed manufactures, handles, or comes in contact with wearing apparel.

Barber, or any other similar trade or calling in which the person employed necessarily comes in contact with other persons.

Domestic servant.

Nurse.

Licensed hackney carriage driver.

Dairyman, or any situation or calling in which the person employed comes in contact with cows or other animals kept for the purpose of furnishing milk.

#### BRITISH GUIANA.

Rules for the better ensuring of "Effective Isolation" of Lepers under Section 35 OF THE LEPERS ORDINANCE, 1905.

1. A leper permitted to isolate himself at his own expense must not engage in any of the following trades or callings:—

Baker, Butcher,

Cook, or any trade or calling in which the person employed handles or comes in contact with articles of food or drink, drugs, medicines or tobacco in any form.

Fishmonger, Washer,

Bootmaker, Tailor, or any trade or calling in which the person employed manufactures, handles,

or comes in contact with wearing apparel.

Barber, or any other similar trade or calling in which the person employed necessarily comes in contact with other persons.

Domestic Servant,

Nurse,

Licensed Hackney Carriage Driver.

Dairyman, or any situation or calling in which the person employed comes in contact with cows or other animals kept for the purpose of furnishing milk.

A leper may employ an attendant.

3. He must not expose his leprosy to the public view.

4. He must

(a) Avoid coming into direct contact with any other person;(b) See that his clothes are washed separately from those of other persons, and within the precincts of his residence;

(c) Use no other utensils but his own for cooking and eating;
(d) Destroy by fire all "dressings" for ulcers that have been used by him.

5. A breach of any of these Regulations will involve the removal of the leper to the Leper Asylum.

Made by the Governor under Section 35 of the Lepers Ordinance 1905, this 21st day of May, 1906.

> N. DARNELL DAVIS, Acting Government Secretary.

No.

#### GOVERNMENT NOTICE.

Government Secretary's Office, Georgetown, Demerara,

23rd March, 1907.

The following Rules, made by the Governor under Section 23 of Ordinance No. 15 of 1905, are hereby published for general information.

> By Command, J. HAMPDEN KING, Acting Government Secretary.

#### RULES MADE UNDER SECTION 23 OF ORDINANCE No. 15 OF 1905 FOR THE PUBLIC LEPER ASYLUM.

- 1. The officers of the Asylum shall be of the following classes, or of such of them and in Officers. such number as the Governor may from time to time consider necessary:-
  - Medical Superintendent.
  - (2) (3) Steward. Matron.
  - (4) Dispenser.
  - Issuer.
  - Attendants, Nurses, and Servants.

#### THE MEDICAL SUPERINTENDENT.

- 2. The Medical Superintendent shall, subject to the direction of the Surgeon-General, have the immediate superintendence and management of the Asylum, and the control of all officers, attendants, and servants employed therein.
- He shall in respect of any of his duties as Medical Superintendent obey such instructions as he may from time to time receive from the Surgeon-General.
  - 4. He shall see that the Rules are strictly carried out.
- 5. He shall not be allowed private practice or other fees, unless specially sanctioned by the Governor.
- 6. He shall visit the Asylum daily, and shall be responsible for the medical care and proper treatment of the inmates, and also for the care of the buildings, grounds, furniture, drugs, and stores of all kinds.
- He shall see and examine all new cases as soon as possible after their admission, and must be careful to admit only such cases as have been committed in accordance with the provisions of the Leper Asylum Ordinance.
- 8. He shall keep a Journal in which he shall enter the date, the hour of his arrival and departure, any orders he may issue to the Steward, Dispenser or Matron, and record any matters of importance.
- He shall see all patients before their discharge and satisfy himself that they are well Discharge of enough to be discharged.
- 10. He shall see that "The Financial Regulations" so far as they relate to the Asylum are strictly carried out.
- 11. He shall forward the Monthly Requisition of Expenditure to the Surgeon-General's Office not later than the 20th day of the month previous to that for which the authority for expenditure is asked; and in doing so shall draw the Surgeon-General's attention to any vote
- of which the one-twelfth part is likely to be exceeded, and state fully the reasons. 12. He shall cause to be kept such Registers of inmates, Case Books, and other books as be necessary.
- 13.—(1) He shall, when necessary, at the beginning of every month hold a Board of Survey consisting of himself, the Steward and Matron for the purpose of examining and reporting on all articles of equipment becoming unserviceable which it is necessary to replace without delay. The report is to be forwarded in duplicate to the Surgeon-General. The condemned articles
- must be replaced from the stock in store or included in the next monthly requisition.

  (2) He shall see that all articles so condemned are entered in a book, put aside in the condemned store-room, and brought up at the half-yearly Government Board of Survey held in the first week of January and July for final condemnation and disposal, in accordance with Section 10 of Ordinance 4 of 1884. This Board has been fixed by the Governor to consist of the Medical Superintendent and Commissary of the Mahaica Fiscal District.
- 14. He shall see that the Defaulters' Sheets of every attendant and servant is properly written up.
- He shall see that a record of the fines inflicted on the attendants, nurses, and servants, is kept, and at the end of each month shall forward to the Surgeon-General a return showing all such fines.

General powers of Superinten dents, &c.

Obedience to instructions. Carrying out

of rules. Private prac-

tice, fees, &c. Visits, care of buildings, &c

Admission and examination of cases.

Keeping of journal.

patients.

Observance of financial regulations.

Monthly requisition of expenditure.

Keeping of registers, case books, &c. Board of

survey.

Keeping of defaulters' sheets.

## THE STEWARD.

Residence.

Performance

of duties.

Absence from asylum. Control of male asylum.

Visits to wards.

Custody and care of provisions, stores, &c. Ordering of

supplies.

Examination of stores on receipt.

Issue of stores, &c.

Checking of requisitions for diets, &c.

Keeping of financial and other books, inventories,

Checking and passing of accounts, &c. Record of

accounts passed. Preparation of "Monthly Requisition of Expendi-ture."

Keeping of "Vote Book."

Checking of moterials for making clothing, &c.

Responsibility as to furniture and equipment in male asylum.

Prevention of communication between male and fomale inmates.

Journal. Weekly

Keeping of

returns of admissions, &c. Custody of patients

Notification of death of inmate.

property.

Reporting escape of inmate.

Cooking and serving of diets.

The Steward shall reside in the quarters provided for him at the Asylum.

17. He shall perform his duties under the control and direction of the Medical Superintendent.

He shall not be absent from the Asylum without the sanction in writing of the 18. Medical Superintendent.

19. He shall be in charge of the Male Asylum during the absence of the Medical Superintendent, and during such absence shall have the general control of all persons connected with the Male Asylum.

20. He shall visit each ward and every part of the Male Asylum at least twice a day. At his night visit he shall satisfy himself that all the inmates are in bed, unnecessary lights

extinguished, and night attendants at their post.

21. He shall have the immediate charge of all provisions, stores, &c. (not being medicines, surgical appliances or instruments) received for the use of the Asylum, and shall be responsible for their custody and care.

He shall prepare all orders for supplies for the Asylum on the Official Counterfoil Order Book, and enter opposite each article the contract number, and in the case of non-contracted articles the letters "n.c."

23. He shall immediately on receipt of all stores examine them himself or direct the

issuer to do so. In case of any difference between the order and the goods received, or any defect in quality he shall note the same in red ink on the counterfoil of the Order Book and report without delay to the Medical Superintendent.

24. He shall see that no stores, diets, or extras are issued except on the written order

of the Medical Superintendent.

25. He shall daily examine and check all requisitions for diets, extras and stimulants, examine and check the store-books, compare the receipts and issues of all stores for the previous day with the orders or requisitions, and report immediately any irregularity to the Medical Superintendent.

26. He shall keep correctly written up the financial and other books in connection with the stores and working parties of the Asylum. He shall see that the inventories are carefully checked in January and July each year.

27. He shall prepare all claims for Asylum dues, check all accounts sent in against the Asylum, and certify the correctness of the prices in rates charged before any such claim is

sent on for payment.

28. He shall when accounts are passed for payment note on the counterfoil of the Order

Book the date and the amount for which each account is passed.

29. He shall prepare the "Monthly Requisition of Expenditure" on the prescribed form, and submit it to the Medical Superintendent, and shall take care that the one-twelfth part of each vote is not exceeded without special authority.

30. He shall keep a Vote Book in which he shall enter all accounts passed against each vote on the annual estimates, and at the top of each column note the amount of the vote for

the year, and, in red ink, the one-twelfth part of the vote.

31. He shall, before any material for making clothing, &c., is issued, have it carefully weighed and the weight entered in the proper book. When the made articles are returned he shall weigh them together with the scraps, enter and compare the weights, and report at once any irregularity to the Medical Superintendent.

32. He shall see that the furniture and equipment in the Male Asylum are kept clean,

and shall report to the Medical Superintendent when any article requires to be repaired or

replaced.

- 33. He shall adopt such precautions in conjunction with the Matron as may be thought necessary to prevent communication of any kind between the male and female inmates.
- 34. He shall keep a Journal in which he shall note every infraction of the Rules, misconduct, or neglect of duty by any of the officers, attendants, or inmates, the action taken in each case, and any other occurrences of importance relating to the Asylum.

  35. He shall furnish a weekly return of all admissions, discharges, deaths, or other occurrences for transmission to the Surgeon-General.

- 36. He shall take possession of all money and other property brought in by inmates, and enter the particulars in the proper book; which book shall be placed before the Medical Superintendent at his next visit for his signature.
  - 37. He shall immediately notify the Medical Superintendent when an inmate dies.
- 38. He shall, when any inmate absconds from the Asylum, at once give notice thereof to the nearest Police Station and enter the same in his Journal.
- 39. He shall see that the diets are properly cooked and served up in a clean and palatable state at the appointed hours and each inmate receives the particular diet ordered, and that no waste takes place.

THE MATRON.

40. The Matron shall reside in the quarters provided for her at the Asylum.
41. She shall not absent herself without the sanction in writing of the Medical Superintendent.

Residence. Absence from asylum.

42. She shall be in charge of the Female Asylum during the absence of the Medical Superintendent, and, during such absence, shall have the general control of all persons connected with the Female Asylum.

43. She shall visit each ward or cottage and every part of the Female Asylum at least twice a day. At her night visit she shall satisfy herself that all the inmates are in bed,

unnecessary lights extinguished, and night attendants at their post.

44. She shall prepare daily a summary of diets, &c., required for the inmates of the Female Asylum as ordered by the Medical Superintendent.

45. She shall have charge and keep an inventory of all clothing and other property in the Female Asylum, and shall be held responsible for the loss of any such property, and shall report to the Medical Superintendent when any article requires to be repaired or replaced.

46. She shall see that all soiled clothing, &c., sent to the laundry is checked, properly

washed, and returned.

- 47. She shall satisfy herself that the weights stated for all material issued to her from the Store are correct, and shall be responsible that the material issued is fully accounted for, and that the articles made from such material are returned to the Store and weighed.
- She shall see that all females admitted into the Asylum are properly washed by the attendants before being admitted into the wards or cottages.
- She shall see that the diets are properly served, that each inmate (female) receives the particular diet ordered, and that no waste takes place.
- 50. She shall adopt such precautions, in conjunction with the steward, as may be thought necessary to prevent communication of any kind between male and female inmates.
- 51. She shall accompany the Medical Superintendent on his visit round the Female Asylum, note any instruction given, and be directly responsible to that officer for the fulfilment of her duties.

#### THE DISPENSER.

52. The Dispenser shall reside in the quarters provided and shall assist the Steward in Residence maintaining cleanliness, order, and discipline in the Male Asylum.

He shall not absent himself from the Asylum without the sanction in writing of the Absence from

Mcdical Superintendent.

54. He shall have charge of and be held responsible for all medicines, instruments, and surgical appliances belonging to the Asylum, and when such are required he shall submit a requisition for them to the Medical Superintendent.

55. He shall be responsible for the proper compounding and the dispensing of all Compoundmedicines and for seeing that they are promptly prepared and delivered, and that all preing of prescriptions are entered in the Prescription Book.

56. He shall see that the names of the patients are correctly and legibly written on Particulars

the bottles, with directions for the administration of the medicine.

57. He shall see that all poisonous drugs are kept in a separate cupboard under lock and key, and that all liniments, lotions, disinfectants, and drugs for external use or of a poisonous nature are placed in the proper bottles and labelled "Poison" before being sent out of the Dispensary, and that no drugs or anything in his charge is issued from the Dispensary except on the order of the Medical Superintendent.

58. He shall keep the following books:-

(a) Register of Inmates, according to prescribed form.
(b) Receipt and Issue Book, in which he shall enter all drugs and medical stores received and issued.

(c) Prescription Book.

(d) Such other books as may from time to time be considered necessary.

59. He shall, upon admission of an inmate, fill up a "Medical History Card" with the Medical name, date of admission, and diet of such inmate.

60. He shall see that all male inmates are properly washed before they are received

into the wards or cottages.

61. He shall visit the wards and cottages daily at such hours as the Medical Superintendent may direct, enquire into the condition of the sick and bedridden inmates, and see that they are properly attended to, and report to the Steward any irregularity on the part of attendants or inmates.

62. He shall have charge of the clothing and bed linen used by the inmates and shall be held responsible for the loss of any such property. He shall report to the Medical

Superintendent when any article requires to be repaired or replaced.
63. He shall see that the clothing and bed linen are changed at least twice a week.

64. He shall see that all soiled clothing, &c., sent to the laundry is checked, properly

washed, and returned.

65. He shall see that the tanks are kept in good order, the drains in a sanitary condition, the closets regularly cleaned and emptied, and that the night soil is disposed of in a proper manner.

## THE ISSUER.

66. The Issuer shall examine, weigh or measure under the direction of the Steward every article sent in by the contractors or others, and immediately report to the Steward if any article is inferior in quality or deficient in quantity.

asylum.

Visits to wards. cottages, &c.

Summary of diets, &c.

Responsibility as to clothing, &c.

Washing of clothing, &c.

Responsibility as to materials issued for making clothing, &c.

Washing of inmates on admission.

Duties as to diets, &c.

Prevention of communica-tion between male and female inmates.

Accompanying Medical Super-intendent on his visits to female asylum

and duties.

asylum.

Charge of medicines, &c.

scriptions, &c.

on labels on bottles. Charge and

labelling of poisonous drugs, &c.

Keeping of registers, &c.

History Cards.

Washing of inmates.

Responsibility as to inmates, clothing and bed linen.

Changing of changing of clothing and bed linen. Checking of clothing from laundry, &c.

Responsibility as to sanitation,

Duties.

Preparation of total summary of diets, &c.

General

store, &c.

67. He shall receive from the attendants in charge of Wards and Cottages in the Male Asylum and from the Matron in the Female Asylum a daily summary of the "Diets, Extras and Stimulants" required for inmates under their charge, from which he shall prepare a total summary, which shall be checked under the supervision of the Steward with the "Diet Book" signed by the Medical Superintendent.
68. He shall make himself generally useful and perform such other duties as the Steward

duties. may require. Keeping of

69. He shall see that the Store is kept clean and tidy and that no person is allowed to enter the Store except on business.

ATTENDANTS.

Definition of.

70. The term Attendant shall include all the employés except the Steward, Matron, and Dispenser.

Hours of duty.

71. The Day Attendants shall attend from 6 a.m. to 6 p.m. and Night Attendants from 6 p.m. to 6 a.m. 72. They shall when required reside in the quarters provided for them, and shall not

Residence and absence from duty. Wearing of uniform, &c.

absent themselves without the sanction of the Medical Superintendent. 73. They shall wear the prescribed uniform, keep themselves clean and tidy, and be kind to the inmates.

Knowledge of

74. They are expected to make themselves acquainted with the instructions laid down in these rules.

75. They shall perform any duty assigned to them, though not of the nature which they

Smoking

usually perform. 76. They shall not smoke during the time they are on duty, except under exceptional circumstances, and then only with the special consent of the Medical Superintendent.

77. They shall assist in maintaining order, discipline and cleanliness, and shall report to the Steward or Matron any irregularity that may come to their notice, whether on the part

of the inmates, attendants or others connected or unconnected with the Asylum.

78. They should prepare daily a summary of diets, extras, &c., required for the inmates under their charge as ordered by the Medical Superintendent.

79. They shall when required assist in apportioning the diets and remain in the diningshed during meals.

80. The Female Attendants shall assist in mending all articles of clothing, bedding, &c.

81. They shall be responsible for all articles committed to their care.

They shall not convey any letter or message from any inmate to anyone out of the Asylum without the permission of the Medical Superintendent.

83. They are not permitted to relate or discuss outside the Asylum anything connected with its affairs or the inmates.

84. They shall not employ the inmates in any kind of work for their own private use.

85. They are to be very careful and see that the inmates do not secrete matches in their beds.

86. They are not to make any inmate the subject of jest, nor must they taunt, tease, or irritate them in any way.

They are not permitted to solicit subscriptions for any purpose from any persons in the Asylum, or directly or indirectly to accept a perquisite of any kind, or to buy anything of, or sell anything to an inmate, or to receive money from the friends of inmates, from contractors, or from visitors to the Asylum, or to purchase any article for any inmate without the permission of the Medical Superintendent.

Any attendant or servant who strikes an inmate or is rough in his dealings with them shall be liable to instant dismissal, and, if considered necessary, will be prosecuted.

89. They are not allowed to appropriate any food, stimulants, clothing, &c. issued for the use of the inmates, or any article belonging to any inmate.

90. They are not allowed to bring any intoxicating liquor into the Asylum, or, without the written permission of the Medical Superintendent, to carry out (of the Asylum) any portion of their rations or allowances.

91. Attendants are warned that all parcels, &c. are liable to be searched by the Gate Porter, and that if any forbidden article is found in them they shall be liable to instant dismissal.

Male attendants shall not visit the female side, or female attendants the male side without the permission of the Steward or Matron.

The Cook attendant must observe scrupulous cleanliness in all details and shall have the meals properly and regularly prepared. He shall not allow any inmate but those actually assisting to enter the kitchen without the sanction of the Steward. He shall before leaving in the evening clean and put away properly all kitchen utensils, and put out all fires, unless otherwise directed by the Steward.

Performance of duties assigned to them.

whilst on duty. Maintaining order and reporting irregularities.

Preparing daily sum-mary of diets. Assisting in apportioning diets, &c.

Mending clothing, &c. Responsibility for articles.

Conveying messages from inmates.

Gossiping about asylum affairs.

Employing inmates for private work. Secretion of matches.

Teasing of inmates, &c.

Soliciting sub-scriptions, accepting perquisites, &c., from inmates, Buying from or selling articles to inmates. Dismissal for illtreating inmates. Appropriating articles belong ing to inmates.

Introducing intoxicating liquor or carrying out rations, &c. Searching of parcels, &c.

Male attendants not to visit female side, and vice versa.

Duties of the cook.

Duties of the artisans.

94. The Artisan attendants, such as carpenter, tailor, shoemaker, &c., shall be responsible for the proper working of their respective departments, and shall keep an inventory of all tools, &c. under their charge and be responsible for their safe custody.

#### DAY GATEMAN.

95. The Day Gateman shall be on duty at the main entrance gate and shall be responsible and responsible condition of the Lodge and its surroundings.

Place of duty and responsibility for lodge. for the condition of the Lodge and its surroundings.

He shall not allow:—

(1) Any inmate to leave the Asylum.

(2) Anyone to enter the Asylum except on business.

(3) Any attendant to go out of the Asylum during duty hours, without a pass from the

Medical Superintendent, Steward or Matron.

(4) Any parcels to be carried into and out of the Asylum without an order from the Medical Superintendent, Steward or Matron.

(5) Any dogs to be admitted.

He shall keep a book in which he shall enter the name of every officer or attendant going into or out of the institution, together with the date and time such officer or attendant shall

go in or out.

98. He shall also keep a Visitors' Book in which he shall enter the name and business Keeping of visitors' book. of any other person going into or out of the Asylum, together with the date and time of entry or exit.

He shall carefully examine all parcels taken into or out of the Asylum, other than Examination those addressed to the Steward, Matron or Dispenser, and report immediately to the Steward of parcels, ac. when such parcels contain any liquors, tobacco, or other articles contrary to the rules.

100. He shall take every precaution to prevent the illegal or fraudulent removal of goods Prevention

or articles from the Asylum.

#### NIGHT WATCHMEN.

101. The night watchmen shall see that the gates are locked not later than 6.30 p.m., all lights put out or lowered as directed at 8 p.m.

102. They shall see that no unauthorised person enters the Asylum, or that anything is brought into the Asylum, without the permission of the Medical Superintendent or the Steward, and take every precaution to prevent the illegal or fraudulent removal of goods or articles

from the Asylum.

103. They shall take every precaution to prevent absconding and also to prevent the Escape, &c., male inmates getting into the Female Asylum or the females from getting into the Male of inmates.

Asylum.

They shall visit the different parts of their beats frequently and mark the tell-tale Marking of tell-tale clocks, such hours as the Medical Superintendent may direct.

Marking of tell-tale clocks, &c. 104. clocks at such hours as the Medical Superintendent may direct.

They shall at once bring any irregularities to the notice of the Steward.

106. They shall keep a book in which they shall enter every occurrence that may happen during their watch, and hand the books to the Steward before going off duty in the morning.

107. Every attendant may, for misconduct, disobedience of the Rules, or of instructions given to them, be punished by fine, suspension, or dismissal by the Médical Superintendent with the approval of the Surgeon-General.

The fine shall not in any case exceed two dollars, and must be submitted to the Surgeon-General, who may disallow, reduce, or increase any fine.

108. Every attendant shall subscribe to the following undertaking on assuming office:

Public Leper Asylum

19

In consideration of my having been appointed to be in the Leper Asylum, and, having had explained to me the Rules especially laid down for my guidance, I hereby promise and agree to obey the said Rules, to avoid gossiping about in the Leper the affairs of the Asylum or of its inmates, to promote, as far as I am able, its objects, to be careful of its property, and to endeavour generally by my own conduct and demeanour to sustain the respectability of its staff. I consider myself bound to perform any duties assigned to me, although not of a nature which I usually perform, should circumstances, in the opinion of the Medical Superintendent, require my doing so. If anything improper is done in my presence or to my knowledge in the Asylum, I consider myself bound and pledge myself to report it to the Medical Superintendent at once. I acknowledge that I am liable to relinquish my situation on receiving two weeks' previous notice for that purposes without the proposed of the boundary of the proposed of weeks' previous notice for that purpose without any reason being assigned, or to be immediately suspended or dismissed by the Surgeon-General for any breach of the Rules when proved against me, and to forfeit all pay then due to me, and that I have no claim to any pension or gratuity at the termination of my service. I also agree to give two weeks' previous notice should I wish to give up my situation.

Dated this day of , 19 .

Witness:

#### THE INMATES.

109. The inmates must obey the directions and orders of the Medical Superintendent, Obedience to Steward, Dispenser, and Matron.

The daily arrangements shall be as follows:-

6 a.m. Rise, arrange beds, remove chamber utensils, wash and clean themselves. 8 a.m. to 10 a.m. Work or occupation; schools for boys and girls and for those adults who desire it.

10-11 a.m. Recreation. 11 to noon. Breakfast.

Duties in regard to

inmates, attendants. parcels, &c.

Record book of officers entering and leaving the asylum.

of illegal removal of articles.

Closing of gates and lowering of lights. Precautions as to illegal removal of goods, &c.

Reporting of irregularities. "Occurrence

Suspension and dismissal of attendant for misconduct, &c.

Subscription to undertaking on assumption of duty.

orders.

Daily arrangements.

Noon to 3 p.m. Resume work, occupation, or school.

4.30 p.m. Dinner and recreation.
8 p.m. All lights extinguished except those allowed by the Medical Superin-

Liability to perform work. Keeping of private

111. They shall, unless exempted by the Medical Superintendent, perform such work and for such length of time as the Medical Superintendent may direct. They may be permitted by the Medical Superintendent to keep their private effects

effects. Disposal of

in the wards or cottages, but shall open all boxes for inspection whenever the Medical Superintendent so directs.

113. They shall not injure, sell, or otherwise dispose of any article of furniture, clothing,

furniture, &c.

food, tobacco, or farm produce. 114. They shall not, without the permission of the Medical Superintendent bathe in the

Bathing in creeks, &c.

creeks or trenches or wash themselves on the groin or dams of the Asylum. 115. They shall not foul any trench or lands of the Asylum.

Fouling of trenches. Removal of articles of

food.

116. They shall not remove from the dining sheds any article of food without the permission of the Medical Superintendent, or, in his absence, of the Steward.

Leaving of the asylum grounds.

They shall not leave the grounds of the Asylum.

Malc inmates not to visit females and vice versa.

118. The male inmates shall not at any time, without the permission of the Medical Superintendent, enter the cottages or grounds of the Female Asylum; and female inmates, in like manner, shall not enter the Male Asylum.

tobacco, &c. Consequences No inmate shall use or have in his possession any tobacco, spirituous liquors, opium,

or any allied substance, without the permission of the Medical Superintendent.

120. Any inmate who assaults any official, attendant, or inmate, or who brings any false charge against any of the above shall be guilty of a breach of the Rules.

of assaulting. Consequences of disobedi-

121. Any inmate refusing to obey orders, breaking any of the Rules, or neglecting to perform such work as they are ordered to perform, will subject themselves to the punishment provided for in Section 24 of the Lepers Ordinance of 1905; and, in case of escape or repeated violation of the Rules, to the punishment provided for in Section 25 of the said Ordinance.

ence of rules, &c.

Days and hours of visits.

VISITORS. 122. Visitors may visit the inmates on such days and hours as the Medical Superintendent may permit.

Bringing in certain articles. Luxuries for inmates.

Visitors shall not bring into the Asylum ganje, opium, wines, spirits, or allied substances, or give such substances under any consideration to the inmates.

inmates.

124. Visitors wishing to take in small luxuries such as sweets, fruit, cakes, &c., may do so but must notify the Gate-keeper who will report to the Steward, who will decide whether the articles are permissible.

Visits to inmates under-

125. Visitors wishing to present any of the inmates with tobacco must deposit it with the Steward, who will report to the Medical Superintendent for his directions.

going punish-ment. Prohibition of attendants to receive gratuity.

Visitors will not, unless by written authority of the Medical Superintendent, be 126. permitted to visit any inmate undergoing punishment

Expulsion for misconduct.

Visitors are not permitted to give any attendant or servant in the employ of the Institution any gratuity or perquisite. Anyone accepting such is liable to instant dismissal. Any visitor misconducting himself or violating any of the Rules will be liable

to immediate expulsion.

127.

OFFICIAL VISITORS.

List of official visitors.

129. The Official Visitors shall be the Judges of the Supreme Court, Members of the Executive Council, Combined Court, Stipendiary Magistrates and Justices of the Peace, and

Making of entries in visitors book.

such other persons as the Governor may from time to time appoint.

130. They may visit the Asylum at such time and as often as they like. At such visits they shall be afforded every information by every officer and other employee of the Institution, and may make such entry in the Official Visitors Book as they may think proper.

(Signed) J. E. Godfrey, Surgeon-General.

Made by the Governor under Section 23 of Ordinance No. 15 of 1905, on the 14th day of January, 1907.

J. HAMPDEN KING, (Signed) Acting Government Secretary.

#### APPENDIX A.

REGULATIONS FOR GRATUITIES TO NURSES AND SERVANTS IN PUBLIC HOSPITALS.\* Made under the Authority of Section 4 of the Public Hospitals' Ordinance, 1885.

1. There will be granted each half-year to the nurses and servants of the Public Hospitals

<sup>\*</sup> By Government Notice, No. 207, of the 30th September, 1885, the Public Hospitals of Georgetown and New Amsterdam; the Free Hospital at His Majesty's Penal Settlement; the Public Hospital at Suddie, Essequebo; the Leper Asylums at Mahaica and Gorchum; and the Lunatic Asylum, Berbice, were declared to be Public Hospitals under the authority of section 2 of the Public Hospitals' Ordinance, 1885, and by Government Notice, No. 41, of the 22nd January, 1892, the Hospital at Bartics, and by Government Notice, No. 191, of 18th October, 1892, the Public Hospital at Morawhanna in the North Western District were declared to be a Public Hospital under the same enactment.

of the Colony who have been of good behaviour, and have efficiently performed their duties during the preceding six months, a certain number of good conduct badges. Persons holding these badges will be entitled to a gratuity of One dollar per mensem.

2. The badges will be awarded on the recommendation of the Resident Surgeons of the

different hospitals, and the number given shall not at any time exceed 10 per cent. of the

number of nurses and servants.

3. The holders of good conduct badges for six months will not be disqualified from again

obtaining them, but their right ceases at the end of each half year.

4. If a holder of a good conduct badge commits any serious breach of discipline or infraction of the rules, or is guilty of continued negligence and inefficient performance of duty, he may at any time be deprived of the badge on the recommendation of the Resident Surgeon.

Passed at a Meeting of the Governor and Court of Policy on Tuesday, 14th August, 1885.

By Command, GEORGE MELVILLE, Acting Government Secretary.

#### APPENDIX B.

REGULATIONS FOR DEALING WITH THE PUBLIC HOSPITALS' FINE FUND.

1. All fines imposed under the provisions of Section 4 of Ordinance 2 of 1885 shall be paid into the Treasury Savings Bank to the credit of a fund to be called The Public Hospitals'

This fund shall be administered and be distributed for the general benefit of the officers liable to contribute to the same, and of their families, in such manner as may, from time to time, be directed by the Surgeon-General with the approval of the Governor; but no officer shall be deemed to have any claim whatever as of right in the fund.

2. The Surgeon-General, when thereto authorised by the Governor, may invest such deposits in Bonds of the Colony; and such fund shall be credited with all sums received by way of interest on account of such deposits or investments.

Made by the Surgeon-General under Section 4 of the Public Hospitals Ordinance, 1885, and approved by the Governor on the 23rd day of January 1903.

and approved by the Governor on the 23rd day of January, 1903.

By Command, (Signed) A. M. ASHMORE, Government Secretary.

#### APPENDIX F.

AUTHORITY FOR SELLING BY AUCTION CONDEMNED ARTICLES AUTHORISED BY HIS EXCELLENCY THE GOVERNOR TO BE SOLD.

The Governor, acting under the provisions of Section 11 of the Auctioneers Ordinance, 1888, has in Government Secretary's letter, No. 4485, dated 16th July, 1896, granted the Surgeon-General, or any of his officers or clerks, authorised by him in writing, general permission to sell at auction any property belonging to the Medical Institutions under his control.

The Surgeon-General in Circular Letter No. 109/7, 317, dated 20th July, 1896, authorised the Steward of each institution to sell any articles recommended by the Half-yearly Board of Surgey, and approved by His Excellence to be seld.

Survey, and approved by His Excellency to be sold.

## APPENDIX G.

REGULATIONS AS TO LEAVE FOR ALL EMPLOYEES UNDER THE MEDICAL DEPARTMENT EXCLUSIVE OF ESTABLISHMENT.

Leave may be granted by the Surgeon-General, provided it causes no inconvenience or additional expense to the Colony.

(a) On full pay, but without rations or ration allowance, and not to exceed 12 days in

each financial year.

(b) On half-pay, not exceeding two weeks for each year of service since the date of the preceding leave of a similar kind.

(c) Without pay or allowances for such period as the Surgeon-General may determine.

2. Any of the above officers becoming sick during service, provided they remain in the institution to which they belong, or are transferred to another institution with the consent of the Surgeon-General, will obtain-

(a) Treatment and maintenance.

(b) Full pay up to 14 days, but without rations or ration allowance, and after that on half-pay for such period as the Surgeon-General may think fit not exceeding three months, when, if the person is not able to resume his or her duties, a special report is to be made by the Resident Surgeon or Medical Superintendent of the institution to the Surgeon-General, who will represent it to the Governor.

Under special circumstances the part of this Rule with regard to remaining in the institu-tion may be relaxed by the Surgeon-General, but in such case the leave will be granted in accordance with Rule 1.

3. Under no circumstances shall the leave granted by the Surgeon-General entitle the person to whom it is granted to leave the Colony. When such permission is required, it must be submitted to the Governor.

4. The lapsing pay and allowances can be used in such way as the Surgeon-General may direct for the payment of substitutes.

5. In each institution a leave book is to be kept in which shall be entered the dates from

and to which all leave is granted.6. The present Regulations are hereby repealed.

(Signed) J. E. Godfrey,

Surgeon-General.

Made by the Surgeon-General and approved by the Governor under Section 4 of Ordinance No. 2 of 1885, on the 6th day of April, 1906.

By Command, (Signed) J. HAMPDEN KING,

Assistant Government Secretary.

#### APPENDIX C.

REGULATIONS FOR DEALING WITH THE FINE FUNDS IN THE MEDICAL PRISON AND POOR LAW DEPARTMENTS.

Grants-in-Aid under the following circumstances may be made from the Fine Fund at the discretion of the Administering Officer, provided that the fund has sufficient at its credit to meet such grants:-

(a) Long-continued illness of an officer involving loss or suspension of pay.

(b) Loss of wife or husband, of a person in Government employment, where such loss involves extra expenditure on the part of the employed in case of the legitimate children of the marriage.

(c) Discharge with or without pension, from ill-health after not less than five years' continuous service, if there are any circumstances by which unusual expenses are

thrown on the official.

(d) To the widow and children of an official who has died in the service; or if an official leaves the service from ill-health and dies within six months after leaving the service, leaving a widow and children.

(e) To establish or maintain, wholly or in part, reading-rooms for officials, or to some similar purpose by which the general body of officials may be benefited.

(f) To assist officials with their expenses when sent on permanent duty from one part of the Colony to another.

Approved by the Governor on the 8th June, 1905.

By Command, CHARLES T. Cox, (Signed)

Government Secretary.

#### APPENDIX D.

EXTRACT FROM THE MINUTES OF A MEETING OF THE COMBINED COURT HELD ON FRIDAY, тне 17тн Макси, 1893.

Gratuities to Non-Pensionable Public Servants.

Be it resolved: That all persons other than Public Servants on the Fixed Establishment, employed under Government without special agreement, shall after three years of continuous service be entitled to three months' notice of discharge, or in case of discharge in consequence of infirmity, to three months' pay in lieu of notice: provided that no person discharged for misconduct shall be entitled to benefit by the terms of this Resolution.

#### APPENDIX E.

BOARD OF SURVEY.

Leper Asylum, the Medical Superintendent, the Commissiary of Taxation, Mahaica District.

N.B.—This Board of Survey appointed by the Governor under Section 10 of Ordinance No. 4 of 1884 (G.S. to S.G. No. 4748, dated 13th of August, 1895), assembles during the first week of January and July of each year on the requisition of the Medical Officer in charge of the Institution, and the report of the proceedings is forwarded in duplicate to the Surgeon-General for the approval and decision of the Governor.

## APPENDIX H.

Rules for the better insuring of "Effective Isolation" of Lepers under Section 35 LEPERS ORDINANCE, 1905.

1. A leper permitted to isolate himself at his own expense must not engage in any of the following trades or callings:-

Baker, Butcher, Cook, or any trade or calling in which the person employed handles or comes in contact with articles of food or drink, drugs, medicines, or tobacco in any form.

Fishmonger. Washer,

Bootmaker,

Tailor, or any trade or calling in which the person employed manufactures, handles, or comes in contact with wearing apparel.

Barber, or any other similar trade or calling in which the person employed necessarily comes in contact with other persons.

Domestic servant.

Nurse.

Licensed hackney carriage driver.

Dairyman, or any situation or calling in which the person employed comes in contact with cows or other animals kept for the purpose of furnishing milk.

A leper may employ an attendant.

He must not expose his leprosy to the public view.

4. He must-

(a) Avoid coming into direct contact with any other person;

(b) See that his clothes are washed separately from those of other persons and within the precincts of his residence;
(c) Use no other utensils but his own for cooking and eating;
(d) Destroy by fire all "dressings" for ulcers that have been used by him.

A breach of any of these Regulations will involve the removal of the leper to the Leper Asylum.

Made by the Governor under Section 35 of the Lepers Ordinance, 1905, this 21st day of May, 1906.

> (Signed) N. DARNELL DAVIS, Acting Government Secretary.

#### STRAITS SETTLEMENTS.

[V. of 1899.]

ORDINANCE No. V. of 1899.

An Ordinance to repeal and re-enact with amendments "The Lepers Ordinance 1898."

[25th April, 1899.]

C. B. H. MITCHELL,

Governor and Commander-in-Chief.

It is hereby enacted by the Governor of the Straits Settlements with the advice and consent of the Legislative Council thereof as follows:—

1. This Ordinance may be cited as "The Lepers Ordinance 1899."
2. In this Ordinance—

Short title. Definitions.

"Leper" means any person suffering from any variety of leprosy.

"Qualified medical practitioner" means the holder of an European or British Indian or British Colonial degree diploma or licence entitling him to practise medicine or surgery or the holder of a degree diploma or licence in medicine or surgery of any medical school of the United States of America the degree diplomas or licences whereof are for the time being recognised as registrable by the General Council of Medical Education Registration in the United Kingdom.

3. The Governor in Council may from time to time by Notification published in the "Gazette" prohibit the carrying on by a leper of any of the trades or callings specified in the

schedule hereto.

4.—(1) Any leper who shall carry on any trade or calling so prohibited as aforesaid and Penalty. any person who shall knowingly employ a leper in any such trade or calling shall be liable on conviction by a Court of Two Magistrates to fine which may amount to fifty dollars or to imprisonment which may be of either description for any period not exceeding one month or to both and any leper so convicted may be committed to a Leper Asylum to be detained there until discharged by Order of the Governor.

(2) Any leper who shall enter any hackney carriage jinrikisha or other public vehicle or lodge in any hotel boarding-house or lodging-house or bathe in any public bath shall be guilty of an offence and shall be liable on conviction before a Magistrate to a fine not exceeding fifty dollars and may be committed to a Leper Asylum to be detained there until discharged by

Order of the Governor.

5. The Governor may establish Asylums at such places as he may think proper for the Asylums. reception and detention of lepers and may declare any place heretofore used for the treatment and segregation of lepers to be an Asylum within the meaning of this Ordinance and shall appoint a fit and proper person to be the Officer in charge of each such Asylum.

6. Whenever any person is convicted by a Magistrate of an offence punishable under section thirty-two of "The Summary Criminal Jurisdiction Ordinance 1872" and such Magistrate by warrant under his hand and seal to order to detention of such leper in a Leper Asylum until he is discharged by Order of the Cayarner. he is discharged by Order of the Governor.

Prohibition of certain callings to lepers.

Detention of lepers becoming a burden on those bound to maintain them.

Removal of lepers.

Power of Governor to release persons detained. Prohibition of dealings with lepers under detention.

Landing of lepers prohibited.

Lepers unlawfully landed may be sent to Leper Asylum.

Lepers unlawfully landed may be returned to the place whence they came.

Detention and recapture of lepers.

Evidence required to prove leprosy.

Applications by lepers for admission into Asylum.

Power to make Rules.

7. Whenever it shall be made to appear to a Magistrate that any person within the limits of his jurisdiction is probably a leper it shall be lawful for such Magistrate upon the application of any person legally bound to maintain the supposed leper to hold an enquiry into the case and if such Magistrate is satisfied that the supposed leper is a leper and that he has become or is likely to become a burden upon the person legally bound to maintain him it shall be lawful for such Magistrate by warrant under his hand and seal to order the detention of such leper in a Leper Asylum until he is discharged by Order of the Governor and the person such leper in a Leper Asylum until he is discharged by Order of the Governor and the person such leper in a Leper Asylum until he is discharged by Order of the Governor and the person such leper in a Leper Asylum until he is discharged by Order of the Governor and the person such leper in a Leper Asylum until he is discharged by Order of the Governor and the person such leper in a leper and that he had been a leper and the had been a leper and the had been a leper and the had been a leper and that he had been a leper and the legally bound to maintain such leper shall pay every month to the Government during the detention of such leper such sum for his maintenance as the Magistrate having regard to all the circumstances of the case shall order.

8. The Colonial Secretary may by order in writing direct the removal of any leper from any Asylum to any other Asylum and such order shall be sufficient authority for the removal of such leper and also for his reception into the Asylum to which he is ordered to be removed.

9. The Governor may by order in writing at his absolute discretion direct the discharge from any Leper Asylum of any person detained therein as a leper under the provisions of this Ordinance and shall so direct the discharge of any person so detained upon the certificate in writing of the Medical Officer of the Asylum that such person is cured of his leprosy.

10. Every person who shall except with the written permission of the officer in charge of a Leper Asylum purchase or receive from any inmate of such Asylum any food clothing or other article shall be liable on conviction by a Magistrate to fine which may amount to fifty dollars or to imprisonment which may be of either description for any period not exceeding one month or to both.

11. No leper who is not a native of the Settlement at which he proposes to land shall land at any of the ports of the Colony from any place not within the Colony or the Protected Native States or Johore and the Master or other person in charge of any vessel who suffers or omits to prevent the landing from such vessel at any such port of any person whom he knows or has reasonable grounds to suppose to be a leper shall be liable on conviction before a Court

of Two Magistrates to a fine not exceeding five hundred dollars.

12. Every leper so landing as aforesaid may be committed to a Leper Asylum by a warrant under the hand of the Governor and may be detained therein for such period as may

be directed by such warrant.

13. Every leper so landing as aforesaid may be brought before a Magistrate who may examine such leper and any other witness on oath touching the place from which he was brought into the Settlement and may cause such leper to be removed to the place from which he was so brought in such manner as the Governor may direct and the reasonable cost of such removal shall be borne and paid by the Master or other person in charge of the vessel by which such leper was brought to the Settlement by whose act or default such leper was permitted to land and may be sued for and recovered as money due from him to Her Majesty.

Every person received into a Leper Asylum under any warrant issued under the provi-14. sions of this Ordinance may be detained therein until he be removed or discharged and in case of escape may by virtue of such warrant be captured by the officer in charge of such Leper Asylum or any officer or servant belonging thereto or any Police Officer and be again conveyed

Asylum or any officer or servant belonging thereto or any Police Officer and be again conveyed to and received and detained in such Leper Asylum.

15. No supposed leper shall be convicted of an offence under this Ordinance or shall be committed to a Leper Asylum or removed from the Colony under the provisions of this Ordinance and no person shall be convicted of any offence with respect to the landing and no costs shall be recovered with respect to the removal of any supposed leper except on the evidence of two qualified medical practitioners that such supposed leper is a leper.

The certificate in writing of a qualified medical practitioner shall be deemed admissible as evidence under this section unless the Court or Magistrate shall otherwise direct.

16.—(1) Any leper desirous of being admitted into a Leper Asylum may make an application to the Health Officer within any Municipality or to any Medical Officer of the Government if beyond the limits of any Municipality in the following form:

"I the undersigned do hereby request you to cause me to be admitted into the Leper "Asylum at and I undertake to remain therein for years at least unless sooner duly discharged and to conform to the Rules of the Leper Asylum.

"Signature of Applicant.

"Signature of Witness.

"To the Health Officer of

"[or To the Medical Officer of the Government at

]."

(2) The signature of the applicant to such application shall be attested by a Magistrate and such Magistrate shall not attest the signature unless he has satisfied himself that the applicant is a leper and understands the effect of the application.

(3) Such applicant after his reception into the Asylum unless discharged by order of the Governor under section nine of this Ordinance shall not be entitled to leave such Asylum until the expiration of the term mentioned in his application and such applicant may be detained therein till the expiration of such term.

17.—(1) Subject to the provisions of this Ordinance the Governor in Council may make Rules in respect of all or any of the following matters:—

(a) The forms of the certificates warrants and orders to be used under this Ordinance.
(b) The management inspection and control of Leper Asylums.

(c) The providing of seperate Leper Asylums for men and women and the providing of special apartments for those lepers who are able to pay their own expenses.

(d) The visiting of lepers in Leper Asylums by their relations and friends.

(e) The appointments and duties of Officers in charge of Asylums.

(f) Any other matters as to which it may be expedient to make Rules for carrying into effect the objects of this Ordinance.

Provided always that such Rules shall make provision:—

- (g) For the making of monthly reports to the Governor by the Officers in charge of every Asylum with regard to the number of lepers detained therein and their condition and the requirements and conditions of such Asylum.
- (h) For the visiting at least once in every six months of every Leper Asylum by the Governor or by some Officer deputed by him.

(2) Such Rules shall be published in the "Gazette" and shall as soon as practicable be laid upon the table of the Legislative Council and unless and until disallowed by resolution of the said Council shall be of the same force as if enacted in this Ordinance.

18. Unless and until a Rule be made under sub-section (h) of section seventeen every Visitors. Leper Asylum shall be visited by the Colonial Secretary or by some other officer appointed by

the Governor once at least in every six months.

19. No action suit or other proceedings shall be brought against any qualified medical practitioner for any certificate given or for thing done in good faith in pursuance of the provisions of this Ordinance or of any Rule made thereunder.

20. Any person committing any breach of this Ordinance or any infringement of any Penalties.

of the provisions thereof or of any Rules made thereunder for which no penalty is expressly provided by this Ordinance shall be guilty of an offence and shall be liable on conviction by a Magistrate to a fine not exceeding fifty dollars and in default of payment to imprisonment for any period not exceeding one month.
21. "The Lepers Ordinance, 1898" is hereby repealed.

Protection of medical prac-

Repeal.

#### SCHEDULE.

List of trades or callings the carrying on of which by lepers may be prohibited by the Governor-in-Council under Section 3:—

Baker. Butcher.

Cook, or any trade or calling in which the person employed handles or comes in contact with articles of food or drink, drugs, medicines, or tobacco in any form.

Tailor, or any trade or calling in which the person employed manufactures, handles, or comes in contact with wearing apparel.

Barber, or any other similar trade or calling in which the person employed comes in

contact with other persons.

Domestic servant.

Nurse.

Jinrikisha puller.

Licensed hackney carriage driver

(Government Notification No. 46, "Government Gazette" of January 19th, page 83.) ORDER IN COUNCIL UNDER "THE LEPERS ORDINANCE, 1899."

(Dated 10th January, 1900.)

Whereas under Section 3 of "The Lepers Ordinance, 1899," the Governor in Council may from time to time by notification published in the "Gazette" prohibit the carrying on by a leper of any of the trades or callings specified in the schedule attached to the said Ordinance:

Now His Honour the Officer Administering the Government in Council has been pleased in exercise of the power conferred by the aforesaid Section to prohibit the carrying on by lepers of any of the following trades or callings:-

Baker, butcher, cook, and any trade or calling in which the person employed handles or comes in contact with articles of food or drink, drugs, medicines, or tobacco in any form.

Washerman, tailor, and any trade or calling in which the person employed manufactures, handles, or comes in contact with wearing apparel.

Barber and any other similar trade or calling in which the person employed comes in contact with other persons.

Domestic servant, nurse, jinrikisha puller, licensed hackney carriage driver.

And it is further ordered that this prohibition shall come into force on the 1st March, 1900, and that a notification thereof shall be published in the "Gazette."

(Government Notification No. 316, "Government Gazette" of March 30th, page 981.) RULES UNDER "THE LEPERS ORDINANCE, 1899."

## (Dated 28th March, 1900.)

In exercise of the powers conferred by Section 17 of Ordinance V. of 1899, His Honour the Officer Administering the Government in Council has been pleased to make the following Rules:-

1. The certificates and warrants to be used under the Ordinance shall be in the forms

set out in the Schedule hereto subjoined.

The Leper Asylums shall be under the management and control of the officers appointed

by the Governor to be in charge of such Asylums assisted by such resident staff of apothecaries, dressers, and attendants as may from time to time be necessary.

3. The officer in charge of Pulau Jerajak Leper Asylum shall visit the Asylum twice a week, and oftener when it may be necessary. He shall, with the approval of the Principal Civil Medical Officer, make such rules for the internal management of the Asylum as may be required for the guidance of the resident staff in their duties. He shall have entire administrative control over the resident staff of officers and servants, and shall superintend the

trative control over the resident staff of omcers and servants, and shall superficted the treatment of patients.

4. The officer in charge of an Asylum shall make monthly reports to the Governor with regard to the number of lepers in the Asylum, and their condition, and with regard to the requirements and conditions of the Asylum; such reports to be forwarded through the Principal Civil Medical Officer. He shall also forward to the Principal Civil Medical Officer such departmental reports and returns as may be required of him.

5. Every Asylum shall be visited by the Principal Civil Medical Officer at his periodical visits of inspection, or at any other time, provided that he shall visit each Asylum not less than once in every twelve months.

6. Lepers in an Asylum may be visited by their relations and friends at such times and

6. Lepers in an Asylum may be visited by their relations and friends at such times and under such conditions as the officer in charge with the approval of the Principal Civil Medical Officer may appoint.

#### SCHEDULE.

#### Warrant under Section 6.

the officer in charge of the Leper Asylum at Whereas A. B. was on the day of convicted by me of an offence punishable under Section 32 of "The Summary Criminal Jurisdiction Ordinance, 1872": And whereas I am satisfied after due enquiry and upon reading the certificates of E. F. and J. K., qualified Medical Practitioners, that the said A. B. is a leper.

This is to authorise and require you to receive the said A. B. into your custody together with this warrant and to detain him in the Leper Asylum at until he is

discharged by order of the Governor.

Given under my hand and seal the day of , 19

> (Signed) (L.S.)

Magistrate.

## Warrant under Section 7.

Whereas upon the application of A. B., I held an enquiry on the day of , into the case of one C. D., a supposed leper, and whereas I am satisfied after due enquiry and upon reading the certificates of E. F. and J. K., qualified Medical Practitioners, that the said C. D. is a leper, and I am also satisfied that he has become or is likely to become a burden upon the said A. B.

This is to authorise and require you to receive the said C. D. into your custody together with this respectation of the details him in the Large Agalage of the particle of the property of the said C. D. into your custody together with this respectation.

with this warrant and to detain him in the Leper Asylum at until he is discharged

by order of the Governor.

Given under my hand and seal this day of , 19

(Signed.)

(L.S.)

Magistrate.

## Governor's Warrant under Section 12.

To Whereas A. B. not being a native of the Settlement of has landed at the port of : And whereas it appears to me upon reading the certificates of E. F. and J. K., qualified Medical Practitioners, that the said A. B. is a leper.

This is to authorise and require you to receive the said A. B. into your custody together with this warrant, and him safely to keep in the Leper Asylum at for a period of from the date hereof.

Given under my hand this day of , 19

Governor.

#### Certificate of Medical Practitioner under Section 15.

I, A. B., a qualified Medical Practitioner, do hereby certify that I have examined C. D. of . , and find that the said C. D. is a leper within the meaning of "The Lepers Ordinance, 1899."

Dated this

day of

, 19

Signed.

#### STRAITS SETTLEMENTS.

#### Ordinance No. XVI. of 1901.

An Ordinance to amend "The Lepers Ordinance, 1899."

[29th October, 1901.]

F. A. SWETTENHAM, (L.S.)

Governor and Commander-in-Chief.

It is hereby enacted by the Governor of the Straits Settlements with the advice and consent of the Legislative Council thereof as follows:—

1. This Ordinance may be cited as "The Lepers Ordinance 1899 Amendment Ordinance and construction.

Short title and construction." The Lepers Ordinance 1899 " (hereinafter and construction.

1901" and shall be read and construed as part of "The Lepers Ordinance 1899" (hereinafter called "the principal Ordinance") and any copy of the principal Ordinance printed after the commencement of this Ordinance may be printed with the amendments alterations substitutions and additions required by this Ordinance.

2. Sub-section (1) of Section 4 of the principal Ordinance is amended by deleting the words "and any leper so convicted may be committed to a Leper Asylum to be detained until discharged by order of the Governor" and by substituting for them the words "and it shall be lawful for such Court of two Magistrates by warrant under the hand of the presiding Magistrate and the seal of the Court to order the detention of such leper in a Leper Asylum until he is discharged by order of the Governor."

3. Sub-section (2) of Section 4 of the principal Ordinance is amended by deleting the words "and may be committed to a Leper Asylum to be detained there until discharged by order of the Governor" and by substituting for them the words "and it shall be lawful for such Magistrate by warrant under his hand and seal to order the detention of such leper in a Leper Asylum until he is discharged by order of the Governor."

4. Immediately after Section 4 of the principal Ordinance there shall be inserted a new section to be numbered 4A as follows:—

Addition of new section to principal Ordinance there shall be inserted a new principal Ordinance.

section to be numbered 4A as follows:-

on to be numbered 4A as follows:—

"4A. If it be proved to the satisfaction of a Magistrate that any leper is not maintained dinance.

principal Ordinance. in a state of isolation from the general public it shall be lawful for such Magistrate by warrant under his hand and seal to order the detention of such leper in a Leper Asylum until he is discharged by order of the Governor."

Illustration :-

A leper who frequents the public streets whether in a vehicle on foot or otherwise will

not be in a state of isolation.

5. Sub-section (2) of Section 16 of the principal Ordinance is amended by deleting the words "the signature of the applicant to such application shall be attested by a Magistrate of the applicant to such Magistrate" and by substituting for them the words "the signature of the applicant to such application shall be attested by a Magistrate of the applicant of the principal ordinance is amended by deleting the office of the principal ordinance is amended by deleting the office of the principal ordinance is amended by deleting the office of the principal ordinance is amended by deleting the office of the principal ordinance is amended by deleting the office of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate of the principal ordinance is amended by a Magistrate ordinan to such application shall be attested by a Magistrate a Health Officer or any duly qualified nance. Government Medical Officer and such Magistrate or other Officer."

Passed this 29th day of October, 1901.

A. W. S. O'SULLIVAN, Clerk of Councils.

#### STRAITS SETTLEMENTS

## Ordinance No. 1 of 1904.

An Ordinance to amend "The Lepers Ordinance, 1899."

[5th February, 1904.]

(L.S.)

W. T. TAYLOR,
The Officer Administering the Government.

It is hereby enacted by the Governor of the Straits Settlements with the advice and consent of the Legislative Council thereof as follows:—

1. This Ordnance may be cited as "The Lepers Ordinance 1899 Amendment Ordinance 1904." It shall be read and construed as one with "The Lepers Ordinance 1899" (herein-

Short title Ord. V. of 1899. Reprints.

after called "the principal Ordinance").

Any copy of the principal Ordinance printed after the commencement of this Ordinance shall be printed with the amendments and additions made by this Ordinance.

2. The schedule to the principle Ordinance is amended by the addition of the words following: following :-

Amendment of the sche-dule of the principal Ordinance.

"Boatman on any boat licensed for the conveyance of passengers or cargo." Passed this 5th day of February, 1904.

E. G. Broadrick, Acting Clerk of Council.

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